Consumers Union

REPORTS

YOUR TELEPHONE BILL: Average Is \$64 A Year

ISEE PAGE 281

COL. \$46.35 PENNA. \$ 57.71 ILL. \$63,07 NATIONAL AVERAGE \$ 64.00 CALIF. \$64.90 N.Y. \$82.36 NEV. \$85.34

WHERE THE \$64 GOES

























EACH COIN REPRESENTS A DOLLAR

FLOOR COVERINGS
GE VACUUM CLEANER
CHILDREN'S CAMPS
GARDEN SEEDS
HOME RECORDERS

25c A Copy, \$3.50 A Year

April 1940



But how can they afford to make so many tests?

Any CU member is apt to run into a question like that about his organization. Sometimes the asker is just curious, sometimes he's skeptical. Whatever he is, he deserves an answer.

For, in fact, CU can't afford to make so many tests—by itself. And that's why we have more than 200 technical consultants in universities, private laboratories, government bureaus.

Many of these excellent people work for CU, using many thousands of dollars worth of equipment, at fees far below the commercial scale or at no cost at all. They do it because they believe in what CU is trying to do. Are they good technicians? Many of them are among the country's outstanding authorities in their special fields. All of them are selected carefully with an eye to their technical skill, their freedom from bias.

Add these consultants to CU's own competent and hard-working staff and you have the explanation. And you can see how it works out in CU's steadily increasing reputation among consumers and technical people alike.

This is one of a series of statements clarifying the work and purposes of Consumers Union.

CONSUMERS UNION OF UNITED STATES, INC. is a non-profit organization chartered under the Membership Corporation laws of New York State and deriving its income from the fees and small contributions of its members. It is sponsored by more than 70 educators, social workers, authors and scientists (names on request). It has no connection, direct or indirect, with any commercial interest and accepts no advertising for any of its publications.

CONSUMERS UNION REPORTS is published monthly in full and abridged form. The Full Reports contains ratings and discussions of higher-priced commodities, as well as much general material, not covered in the Abridged. All members receive along with the Reports an Annual Buying Guide (Full or Abridged)—a compact booklet rating more than 2,000 products.

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CORRESPONDENCE should be addressed to Consumers Union, 17 Union Square West, New York City. CU regrets that time does not permit answering of inquiries for special information or requests for advance test data.

Is This What We May Count On?

Time and again in the propaganda pieces that flow so unceasingly from the world of advertising out to women's clubs, schools, churches and other concentrations of influence, the consumer movement is charged with ignorance of the intricacies of advertising and business. And if the consumer knows not whereof he speaks, they ask, how can he expect his criticisms to make sense?

The first thing to be said about this charge is that it takes a little too much for granted. Many pennies have gone through the wringer in the last 10 years of depression and the consuming public has been figuring out a number of intricacies all on its own. In the same period of time a great deal of teaching in the business of buying has gone over the desks of the nation's schools; and there has been a vast awakening on the part of buyers to their interests as buyers and to what affects those interests and how; and the consumer has developed organizations and programs of his own and through those organizations and programs has learned much and is learning more.

The second thing to be said about the charge is that, as used, it is irrelevant. It is irrelevant because it is used in defense of practices, or in opposition to the correction of practices, that have nothing to do with the intricacies of anything except the seller's contempt for the buyer's interest. As one case in point, the consumer asks for honest and informative advertising. The advertiser answers that unless his advertising is half fiction and pretty pictures, it won't sell his product. Where lies the significance: in intricacies of advertising technique unsuspected by the consumer; or in the fact that public acceptance of advertising claims has shrunk so far that advertisers themselves are demanding a revaluation of their techniques?

AND Now let's turn the mirror around. Does the advertiser know what the consumer movement is all about, what it wants, why it wants it? A movement based on the interests of the buyers of the nation has got a lot of intricacies to it. Do the advertisers understand them?

At this point we give you Mr. Douglas Taylor, vice-president of *Printers' Ink*, old and eminent organ of the advertising business. Mr. Taylor was one of the featured speakers at the Second National Conference on Consumer Education, held at Stephens College in Columbia, Mo., the first three days of this month under the auspices of the Institute for Consumer Education. The subject on which Mr. Taylor spoke was "What Should Be Taught About Advertising In A Consumer Course?"

There were close to 1,000 delegates at this conference—consumer educators, home economists, government officials, leaders of consumer organizations, watchful business representatives. They had come from all parts of the United States. And it is safe to say that few items on the agenda were awaited with more interest than this one to which Mr. Taylor addressed Himself.

This is what he said. On the economic side, he urged consumers not to break down confidence in advertising. In defense of emotional appeals, he suggested that if a girl used some of the nationally advertised cosmetics, she

REPORTS & CONSUMER NEWS IN THIS ISSUE



The purposes of Consumers Union, as stated in its charter, are "to obtain and provide for consumers information and counsel on consumer goods and services . . . to give information and assistance on all matters relating to the expenditure of earnings and the family income . . . to initiate and to cooperate with individual and group efforts seeking to create and maintain decent living standards for consumers."

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APRIL 1940

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would be better armed—psychologically—to get her man. Perhaps we have not subjected Mr. Taylor's speech to proper microscopic examination. But listening as diligently as we could we could not, in all honesty, get much more out of it.

And in all honesty we don't think Mr. Taylor intended to play around with his subject quite so superficially. The fact is that he did. And the reason he did, we think, is that he simply hadn't taken the trouble to figure out what consumer representatives are really thinking about or looking for. The elementary fact that teachers and consumer representatives with no excess of income don't run around the country listening to speeches unless they are seriously interested in finding out how they can do what they are doing better, did not get through to Mr. Taylor.

WE REALIZE that this is hard on Mr. Taylor, and perhaps a little unfair as well. For any one of a number of others from the advertising domain would have given much the same performance and have, in the past, given quite as bad ones. But why should any speaker for advertising reveal himself as thus completely isolated from his audience—the members of which are, on other days, a part of the audience for advertising itself? It is a question that cannot be answered by complacent references to trade intricacies or by automatic bromides. The consumer has moved on several steps further; he is looking for information.

And maybe that fact did get through to Mr. Taylor as he listened to the respectful applause that greeted the rebuttal by his co-speaker, Professor Harold Rugg of Teachers College, Columbia University: "I am dismayed at the performance this evening. Is this what we may count upon . . .? Mr. Taylor hasn't met one single point we made tonight. We came a thousand miles to find out if we were wrong. . . . He says we must not break down confidence in advertising. My dear Mr. Taylor, if advertising has integrity, you can't break down the confidence of the American people in it."

(As we go to press the Stephens College Conference is still in session. Next month's Reports will carry a summary of the proceedings, with excerpts from several of the addresses.)

Reports in Progress

Work on the following reports, among others, is either now under way or scheduled to begin shortly:

Exposure Meters
1940 Refrigerators
Carbonated
Beverages
Pipe Tobacco
Coffee

Electric Fans
Portable Radios

Soilless Growth

Soilless Growth
Buying Wood
Furniture

Television: Here to Come

BACK in June, Consumers Union, appraising television up to that time, noted its generally low quality of reception, its high prices, the possibility of rapid obsolescence of equipment, the small amount of material broadcast. CU counselled waiting at least a year.

A month ago the Federal Communications Commission, after investigation, spoke of the "need for further improvements in the technical quality of television." "Nothing," said the FCC, "should be done which will encourage a large public investment in receivers. . . . Development of the industry does merit limited commercial operations in the near future . . . beginning September 1."

RCA apparently read the FCC report with mirrors. Middle of last month it came out in the New York Times with a smash-bang full-page advertisement, surrounded by tie-in advertisements over the names of various retail outlets, all trumpeting an RCA model at \$395. A few days later the FCC withdrew its permission for "limited commercial operations" from—as the Times later described it—a "stunned" industry. RCA, it seemed, had forgotten about the starting date and that word "limited." Trade wiseacres said RCA was trying to unload present sets preparatory to making better ones.

Quality of television reception and quantity of broadcasting is still low; prices, though reduced, are still high; and rapid obsolescence seems even more likely. The FCC presumably regards television as a future miracle, not a present one. CU, agreeing, still counsels patience.

Milk: Flank Attack

WE CAN'T help but admire the resourcefulness of the big milk companies. As CU members will recall (see February Reports), the Health Dep't of New York City, after a four-year fight by consumers, ruled in favor of a one-grade milk system. Mayor La Guardia announced volubly that Grade B milk was just as safe as Grade A and that there was no reason for mothers to pay a premium for Grade A. Pay less and drink more was the tenor of his talk.

The milk companies did not agree. They took advertisements in New York papers; they held "consumer conferences"; inspired "typical consumers" spoke of the "American way." But the Health Dep't had made its ruling; the one-grade system was scheduled to go into effect September 1.

And then—we can't imagine how—something happened. The New York State Senate and Assembly passed the Ryan-Stephens Bill, which is, as New York *Times* puts it, "intended to prevent New York City from establishing a single grade of milk." CU, along with other consumer organizations, has wired its protest to Governor Lehman, who has the bill now.

The Governor has until the end of this month in which to consider and either sign or veto the bill. CU hopes that he decides in the interests of his electorate rather than those of the milk companies. CU suggests that its members in New York write or wire him, telling him that they hope so, too.

TECHNICAL SECTION

OF CONSUMERS UNION REPORTS

Ratings of products represent the best judgment of staff technicians or of consultants—more than 200 specialists selected for competence and freedom from commercial bias—in university, governmental and private laboratories. Samples for test are in practically all cases obtained on the open market by CU's shoppers. Ratings are based on laboratory tests, carefully controlled use tests, the opinion of qualified authorities, the experience of a large number of persons, or on a combination of these factors. Most ratings of necessity reflect opinion as well as scientific data. For even with rigorous tests, interpretation of findings is often a matter on which expert opinion differs. It is Consumers Union's pledge that such opinions as enter into its evaluations shall be as competent, honest, and free from bias as it is possible to make them.

"Best Buys" should give greater return per dollar although some products rated "Also Acceptable" may be of higher quality. Escept where noted, a product rated "Not Acceptable" is judged not worth buying at any price, because of inferior quality or because it is potentially harmful.



GE's Bargain Cleaner

. . . which is the subject of a high-pressure campaign by New York's Consolidated Edison, is rated—provisionally—as a good buy

When New York's Consolidated Edison gets behind an advertising campaign, citizens may be assured that it will be a big one. Last year, Edison tried to persuade a good many people to buy a radio-phonograph combination. CU, in response to requests, weighed the set in the balance, found it wanting, and rated it "Not Acceptable" (CU Reports, October 1939).

This year, full-page newspaper advertisements announce that "LATEST G.E. DE LUXE TANK-TYPE CLEANER" is being offeredfor a limited time only, of courseat \$36 cash or \$38.48 in monthly installments (with your old one in exchange). Edison will throw in a floor lamp and an electric iron for \$40 cash or \$43.28 in installments. Following a flood of members' inquiries, a preliminary test of the cleaner was made. The cleaner, CU found, deserves a better rating than last year's radio-phonograph offer.

One sample was purchased by CU and subjected to such tests and examinations as time allowed. The tests indicate that, price considered, the GE cleaner is a good buy. Cleaning ability is adequate although in a limited test it was impossible to compare it with

other tank-type cleaners. Both motor and blower are well constructed, but the tank itself is of light-gauge metal and may dent easily in handling. This model seems to be, as claimed, essentially the same as GE's \$62.50 model.

The power switch, easily operated by foot, is located on the top of the tank. While this is a convenience, it is doubtful that the switch will stand up long in use. Servicemen report that repairs

on this type of switch, on the GE \$62.50 cleaner, are rather frequent.

Attachments for special purposes (upholstery cleaner, floor brush, dusting tool, &c.) are similar to those furnished with other cleaners of this type, of which the *Electrolux* is probably the best known.

There is, however, a marked difference in the tool most frequently used—the carpet cleaner. The Electrolux carpet cleaner is swivel-mounted, with a large opening on one side and a smaller one on the other. The smaller nozzle is especially useful in picking up lint or threads, which tend to stick to the nap of the rug and are not removed by the larger nozzle. The corresponding GE tool relies on a brush to pick up lint, which interferes with the free motion of the cleaner and causes some difficulty with loose rugs.

Incidentally, the superior *Electrolux* tool will fit the *GE*. It can be purchased from vacuum cleaner supply stores for \$2.25, and CU strongly recommends that it be obtained.

CU's tests indicate that the GE cleaner is not as good as the Electrolux either in cleaning efficiency or quality of construction. At the price of \$36, however, and particularly if the Electrolux carpet cleaning tool is obtained, it is a good buy.

It must be emphasized that CU did not make comparative tests of this cleaner with *current* models of other brands. A test of cleaners is scheduled to get under way shortly, and the GE, along with other brands, will then be submitted to thorough tests.



CLEANING ABILITY

... is adequate; motor and blower are both well constructed; the carpet cleaner is inferior

When You Ask for Linoleum

. . . you may be shown any one of a number of the cheaper and more widely sold substitutes, which resemble linoleum in surface appearance only; here are comparative test results on dominant brands of both

WHEN you go into a store and ask to see linoleum, you may be shown a lot of things that aren't linoleum at all-mostly "felt base" products. These are ersatz productslinoleum substitutes, manufactured not because they are superior to linoleum but because they are cheaper.

It will be a rare salesclerk indeed who volunteers an explanation of the differences between linoleum and its substitutes. Yet they are no more alike

than silk and rayon.

Basically, linoleum has changed very little since the time in 1862 when Frederick Walton, an English inventor, discovered that oxidized linseed oil, combined with kauri gum, resins, and cork, formed a durable and sanitary floor covering. Today, linoleum is still defined as a mixture of linseed oil with ground cork, wood flour, and pigments in varying proportions, impressed on a burlap base.

Asphalted felt base floor coverings have a slight surface resemblance, but in composition, as the name suggests, they consist of a base of paper, or "felt" made from asphalt-saturated rags and finished with various kinds of surfacing materials. Although they lack most of the desirable qualities of true linoleum, the annual yardage produced is several times greater. For they are generally lower in price.

Their large variety of types offered under many different trade names, may account for the confusion that seems to exist in the minds of shoppers as to which floor coverings are linoleum and which are not. But an easily ascertainable distinction exists. Linoleum has a burlap back; its substitutes do not. For those linoleums backed with an adhesive, which conceals the burlap, a glance at the side will reveal the kind of base.

THERE are three basic types of lino-leum: plain, printed and inlaid;

A note on labor conditions in the linoleum

all others are but variations of these. Plain linoleum comes in solid colors and in thicknesses of a inch (standard), 3 inch (medium), and 1/8 inch (heavy). "Battleship" is a name applied to even heavier gauges of plain linoleum, needed only where wear is extreme. Jaspé linoleum (a variation of plain) has a two-toned striated effect. Its heaviest gauge is inch, equivalent to medium "battleship."

Inlaid linoleum is the most expensive. In both types of inlaid (straightline and molded), as in plain linoleum, the colors extend through to the burlap backing: the linoleum is good. therefore, until it is worn through to the back. Straightline inlaid consists of squares cut from plain linoleum of different colors, fitted together in a pattern, and welded at great pressure to a burlap backing. In molded inlaid. the colors are deposited on the burlap by sifting the pigments through stencils. This type is frequently embossed to give it the appearance of ceramic





INLAID LINOLEUM

. . . maintained its pattern after hundreds of rounds on CU's abrasion machine

Printed linoleum is least expensive of all, and least durable. It is made of a very thin grade of plain linoleum upon which patterns have been printed, usually in oil paints. The painted surface is generally lacquered in manufacture and requires frequent lacquering to keep the pattern from wearing off. Once that happens, of course, the linoleum, from the point of view of appearance, is finished.

Variations among brands and types of felt base floor coverings come chiefly from the composition of the surfacing materials. Some wear fairly well, others badly. And they all lack the resiliency that cork gives to true linoleum; they tend to tear and crack easily. If carefully laid, however, and properly cared for, they can give fair service. But, like printed linoleum, they are of little good after the surface pattern has been worn through.

Their one advantage over linoleum is that the moisture-proof felt base will not be affected by water, while the burlap base of linoleum will be. They are extremely thin (5 inch or thinner) and are recommended mainly for their low initial cost.

THE LIFE of any floor covering will The Life of any state of depend to a considerable degree on the care with which it is laid. Skill is required to do a good job, and it is usually more economical to allow for the installation cost than to spend more on the linoleum and lay it badly.

Linoleum should not be unrolled or handled in cold weather without first being kept at a temperature of 70° for 24 hours; nor should it be put down on an uneven surface. If the wood floor is uneven, the best procedure is to have it sanded to a smooth surface. Or the floor may first be covered by a layer of felt paper one-eighth inch thick cemented down. The linoleum is then fastened to the felt paper with linoleum paste. Congoleum-Nairn furnishes some linoleum with the adhesive already on the back.

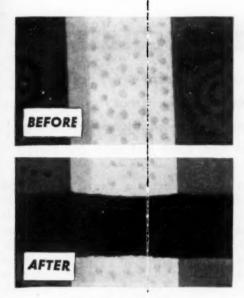
Seams must fit snugly. The baseboard molding should be removed and the edges of the linoleum cut back one-quarter to one-half inch from the baseboard, to provide for expansion. After three or four weeks (that is, after expansion) the linoleum may be tacked down at the edges and the baseboard molding replaced.

Linoleum should never be laid on

Technical Section

industry will be found on page 33.

CONSUMERS UNION Reports



PRINTED LINOLEUM

... was worn through by the abrasion machine to the unsightly oil base

moors below ground level unless they are thoroughly damp proof, for water is a natural enemy of linoleum. Cement composition floors may require special treatment first.

Proper care is equally as important as correct installation to the life of floor coverings. It has been said that more linoleum is washed away than worn away. For most soap contains free alkali, which attacks the oil in linoleum, and moisture underneath rots the burlap backing. Linoleum should be washed with a minimum amount of water and neutral soap (such as Lux or Ivory Flakes, Ivory Snow, and most floating cake soaps), rinsed with clear water, and wiped dry with another cloth.

Abrasives should be used only when they are absolutely necessary to remove spots; and then only the mildest kind should be used (see page 11).

Although most plain and inlaid linoleum is now waxed in manufacturing, it should be waxed again after installation and at frequent intervals thereafter. Only water-emulsion waxes should be used on linoleum (see October 1939 Reports). Not only does the wax film protect the surface from wear, but it also facilitates cleaning, which should, if possible, be mostly a matter of using a brush or a dust mop.

Printed linoleums and felt base floor coverings should never be waxed, as wax tends to soften the painted surface. These are usually given a lacquer coating at the factory and lacquering them several times a year will greatly increase their life.

There are relatively few brands to choose from in floor covering. Most linoleum is made by Congoleum-Nairn, Armstrong Cork Co., Sloane-Blabon and Paraffine Companies, Inc. Each of these also makes a felt base product; and two other companies, Delaware Floor Products, Inc., and Bird & Son, account for most of the balance on the market.

The type of floor covering to buy depends on the use to which it is to be put. Naturally, the thicker the covering, the more wear it will give; where wear is heavy and the covering is to be used for a long time, the thicker grades will be found cheapest in the long run, but thicknesses over ½ inch are rarely required for home use.

The ratings in this report are based on laboratory tests and examinations. Samples of nearly every type and thickness of each manufactured product were purchased; tests were based on the requirements in Federal Specifications for linoleum, which cover pliability, indentation (as caused by heavy furniture), thickness, seasoning, color, pattern and finish. Tests for resistance to abrasion were made with the leather abrasion testing machine designed by the National Bureau of Standards. Tests were also made to determine the effects of alkaline cleansers.

In the absence of reliable performance tests, the ratings of relative wearing qualities are necessarily based on these laboratory tests, although there are many conditions that affect wear in use which cannot be duplicated in the laboratory.

Test results permit the drawing of some general conclusions. Linoleum with plain colors is likely to wear better than that with variegated colors, such as the Jaspé and the inlaid types. They are cheaper to buy; and, because it is unnecessary to match patterns, there is no waste in laying them. Darker colors should, to judge from the tests, wear better than lighter ones. Inlaid linoleums are not likely to be as serviceable as plain linoleums of the same gauge. Uneven wear on Jaspé linoleum causes distortions in the striations.

On the basis of laboratory tests, it is difficult to draw comparisons be-





FELT BASE

... floor-coverings (except Koloflor and Chromalin) all lost their pattern

tween the felt base floor covering and linoleum. In general, although they are cheaper, felt base coverings will be found to give less service per dollar. Where the traffic is very light, where they are to be used in an apartment (and for only a year or two), and where they can be properly cared for, felt base coverings can be recommended.

Prices vary somewhat in different stores. The prices given in the ratings (per square yard) are those paid for samples used in the test.

LINOLEUM

Differences in quality between different brands are not great; as noted above, far greater differences exist between different types of the same brand than exist between brands.

Acceptable

(In approximate order of quality as indicated by the tests.)

Sloane-Blabon (Sloane-Blabon Corp., Trenton, N. J.). Printed 79¢, standard plain \$1.14, ½" plain \$1.52, medium battle-ship (3/16") \$1.92. All grades and colors tested were consistently better in resistance to abrasion and to indentation and in pliability than the other brands tested

Congoleum-Nairn Sealex (Congoleum-Nairn, Inc., Kearny, N. J.) Printed 82¢, standard plain \$1.14, ½" plain \$1.74, medium battleship (3/16") \$1.85. Most patterns are also furnished with adhesive back at additional cost of about 10¢ per square yard. Resistance to abrasion and to indentation were slightly less than in Sloane-Blabon samples.

Pabco (Paraffine Companies, Inc., San Francisco, NYC). Printed 87¢, standard plain \$1.18, ½" plain \$1.79, medium battleship (3/16") \$1.97.

Armstrong (Armstrong Cork Co., Lancaster, Pa.). Printed 64¢, standard plain \$1.34, ½" plain \$1.64, medium battleship (3/16") \$2.04. Fair resistance to abrasion and indentation.

FELT BASE FLOOR COVERINGS

Best Buys

Chromalin (Bird & Son, East Walpole, Mass.). 84¢. An unusual felt base product with the same abrasion resistance and alkali and indentation resistance as Koloflor. Both these brands were found to be much superior to the other felt base floor coverings.

Koloflor (Delaware Floor Products, Inc., Wilmington, Del.). 98¢. This is not the usual type of felt base product. Superior in abrasion tests to printed linoleums and, except for Chromalin, to the other felt base products tested; extremely pliable, resistance to alkali exceptional, good resistance to indentation.

Also Acceptable

(In approximate order of quality as indicated by the tests.)

Bird's Felt Base "Armored with Bakelite"
(Bird & Son). 49¢. Low in resistance to alkali. Recommended only for conditions of use as described in text above. Low resistance to abrasion. This brand was found to be particularly ¶exible.

Armstrong's Felt Base (Armstrong Cork Co.). 49¢. Low in resistance to alkali. Recommended only for conditions of use as described in text above. Low in resistance to abrasion. Fairly flexible.

Not Acceptable

(The following brands showed very poor quality in the tests.)

Congoleum Gold Seal (Congoleum-Nairn). 46¢. Flexibility poor, cracks easily.

Congoleum Crescent Seal (Congoleum-Nairn). 40¢.

Calomor (Sloane-Blabon Corp.). 40¢.

Pabco Stainless Sheen (Paraffine Companies, Inc.). 60¢.

Home Sound Recording

But tests of two models of the Recordio reveal limitations to their usefulness. Ratings of both are given, along with ratings of two combinations on which tests have just been completed

Sound recordings that you make at home, like amateur movies, are rarely as good as the professional product. Yet for people who want to record their own voices, favorite radio programs or the like, the two recorder models tested by CU and here reported on will prove, at the very least, interesting gadgets. These were the Recordios—a cabinet model (containing radio, phonograph, recorder, and public address facilities) and a portable (which had no radio).

In general, on the two Recordios tested, voice recordings varied from good to excellent; those made through the microphone were clear and easily recognizable, although slightly unnatural; radio voice recordings sounded as voices do over the radio. Recordings of radio music, on the other hand, did not fare so well—principally because of a loss of high notes.

The Recordio Model A-70 proved satisfactory as a 9-tube radio and only slightly less so as a phonograph. It was found inadequate to fill its other advertised use—that of a public address system, whereby the voice of a person addressing the microphone is amplified and reproduced by the loud-speaker. Power output was low, and, while the volume was sufficient for home reproduction of radio and records, distortion was evident when the microphone output was set for greater volume than the human voice could normally achieve without a microphone.

While the *Recordio* offers a fairly satisfactory radio and phonograph, for those things alone a straight radio-phonograph—such as the *Lafayette* Models BB-7 or BB-13—is a better buy. So far as tone quality goes, the *Recordio* A-70 falls between the *Philo*



205RX and the RCA K-80 as a radio, and between the Ward's Airline—805 and Sears' Silvertone—6346A as a phonograph (see January Reports for complete tone quality table). The Recordio Model A-72, a portable recorder-phonograph, without radio, rates lowest in the list of phonographs tested by CU.

Recordings with both models are made with a cutting head and a steel stylus on plastic or acetate record blanks, of 6, 8 or 10 inch diameter. The stylus costs 69¢ and is good for from twenty-five to fifty 10-inch re-

Plastic blanks sold by Recordio cannot be recommended on the basis of CU's findings. They wear out quickly and have a high noise level (needle scratch), relatively poor fidelity, and low playback volume. These blanksboth red and white type-are good for only about six to 10 satisfactory playbacks, and wear can be detected after one or two performances. The groove walls on records made from Recordio blanks are weak, causing the needle to break through occasionally and skip a groove. Also, the needle was sometimes found to pick up sounds from adjacent grooves.

Except for novelty recordings, where only a few playbacks may be required, and for practice purposes, acetate blanks (on aluminum) are to be preferred, despite the fact that they cost almost twice as much.

The price of a Presto Orange Seal, 8-inch acetate disk (about equivalent in playing time to an ordinary 10-inch record) is 55¢. A cheaper 8-inch acetate record, the Perma Disk, which CU found generally satisfactory except for one or two samples in which the acetate had been improperly applied to the aluminum base, sells for 40¢. Perma Disk records were played back 50 times and, while some wear was recorded by test instruments, none was noticeable to the ear.

As acetate disks harden with time, they should be recorded within a month or two after purchase. They may be cut on both sides, and played back immediately with ordinary steel needles. Recordio needles were found to cause excessive record wear. RCA Victor Full Tone steel needles, changed after each playing, gave excellent results.

The Recordio cuts 106 lines to the

inch, the record turning at 78 revolutions per minute. A 6-inch record will play for approximately 2 minutes; an 8-inch record for 3.4 minutes; and a 10-inch record for 4.4 minutes—about as long as the average standard 12-inch record (because there are more lines to the inch on the *Recordio*).

Tests on two new-model radiophonographs could not be completed in time to be included in the ratings of combinations in the January 1940 issue of the Reports. These, the Philco Model 508 and the RCA Victor U-40, are rated below along with the Recordios.

The Philco incorporates an RCA automatic record changer practically identical with that described in the January Reports. It is noisy and unreliable. The phonograph tone quality of this combination is very good, placing it between the Lafayette BB-13 and

BB-7 in the January tone quality table already mentioned. In radio tone quality it falls between the Sears' Silvertone—6336 and the Philco 195XX. In the general listings, the Philco 508 rates as "Also Acceptable," following the Lafayette Model BB-13.

The RCA Victor Model U-40 employs a modified design of the same record changer. While the automatic trip mechanism has been improved, and the changer will handle mixed records, the record changer is unsatisfactory in many respects and likely to injure records. In both radio and phonograph tone quality, the U-40 rates just ahead of the Recordio A-70. In the general listing, it rates last among the "Also Acceptable" models.

Since the *Recordio* falls in a particular class of its own, it cannot be rated in a general comparison of straight radio-phonograph combinations.

HOME RECORDER COMBINATIONS

Acceptable

Recordio Model A-70 (Wilcox-Gay Corp., Charlotte, Mich.). \$139.95, including microphone. (Can be purchased from the Radolek Co., Chicago, for \$97.45.) Recorder - radio - phonograph combination. Small console. 9 tubes including tuning eye (which is used only as a volume level indicator for recording). Continuous tone control. No push-buttons. Power and tone good on radio and phonograph. Tendency to howl on short waves. Sensitivity good; selectivity excellent. Slight shock hazard. Single record player. Required considerable juggling to place a 12-inch record on the turntable. Motor noisy. Noticeable hum on both radio and phonograph. See introduction for data on recording.

Recordio Model A-72. \$79.95 including microphone. Portable recorder-phonograph, in airplane-luggage type carrying case. 5 tubes including eye which functions as recording level indicator. Continuous tone control. Tone poor, with very little bass. Recording characteristics satisfactory and identical with those of the A-70. Cannot be used for public address work as advertised, because of howling and inadequate volume for this purpose. This instrument cannot be recommended as a phonograph, but is acceptable for making recordings.

RADIO-PHONOGRAPHS

Acceptable

Philos Model 508 (Philos Radio & Television Corp., Philadelphia). \$139.95. Radiophonograph combination. Large console. 8 tubes. 550 to 1,500 kilocycles; 1.5 to 3.5 and 5.5 to 18 megacycles. Short-wave and broadcast band loops. Continuous tone control. 6 push-buttons with excellent action (but best set by serviceman). Low background noise. Sensitivity, selectivity, radio and phonograph tone very good. Volume good. Whistles hadly on short-wave bands. Slight shock hazard. RCA automatic record changer (plays twelve 10-inch or ten 12-inch records unmixed) unsatisfactory. Needle difficult to insert.

RCA Victor Model U-40 (RCA Mfg. Co., Camden, N. J.). \$119.95—less a \$20 allowance for your old set. Radio-phonograph combination. Large console. 7 tubes. 540 to 1,569 kilocycles and 5.8 to 17.85 megacycles. Short-wave and broadcast band loops. 3-point tone control. 6 unsatisfactory push-buttons make this set "Not Acceptable" for anyone dependent upon push-button tuning. Phonograph and radio tone good. Sensitivity good, noise level high. Selectivity fair. Automatic record changer (plays seven 10-inch records and eight 12-inch records straight or mixed) unsatisfactory. Reject action will scratch records badly if the reject control is pushed near beginning of record, where normally it would be used.

Canned Peas - Price and Quality Ratings

SIX sizes of canned peas are recognized by government graders, ranging from less than 3 inch to over 11 inch in diameter. Although size is not a factor in grading, small peas tend to be tenderer and to have generally better characteristics, with

consequent higher scores. The very large ones are often older and tougher.

Two types are recognized in grading: early and sweet. Early peas are quicker to mature than sweet peas, which are somewhat wrinkled and have a natural sweet flavor. The following listings are based on tests made for CU by the U. S. Dep't of Agriculture. Score is based on clearness of liquor, absence of defects, uniformity of size and color, tenderness, maturity, flavor. Two to 10 samples of each brand were tested.

| | 1 | VER. COS | 2 | | PER NO. 2 | | | | |
|--|--------|------------|----------|---|------------------|------------|-----------------------|--|--|
| BRAND AND PACKER OR DISTRIBUTOR | STYLE | CAN (e) | SCORE | BRAND AND PACKER OR DISTRIBUTOR | STYLE | CAN (¢) | SCORE | | |
| | | | | Iris 1 (Haas, Baruch, Los Angeles) | Sweet | 14 | 841 | | |
| Grade A | | | | Jack Sprat 1 (Jack Sprat Foods, | | | | | |
| | 7.1 | | | Marshalltown, Iowa) | E&S | 15 | 85 | | |
| (In alphabetical o | | | | Krasdale (A. Krasne, NYC) | Sweet | 15 | 80 | | |
| Asco (American Stores, Philadelphia) | Sweet | 15 | 90 | Kroger's Country Club 1 (Kroger | | | | | |
| Colonial (Nat'l Food Prod., NYC). | Sweet | 11 | 90 | Groc. Co., Cincinnati) | E&S | 15 | 803 | | |
| Grand Union (Grand Union, NYC) | Early | 19 | 90 | Kuner's (Kuner, Brighton, Colo.) | Sweet | 13 | 82 | | |
| Hunt's Supreme Quality (Hunt Bros., San Francisco) | Sweet | 13 | 91 | Lakeside (Lakeside Pack., Manito- | _ | | | | |
| Leslie 1 (Rocky Mountain Pack., Salt Lake City) | Early | 11 | 91 | woc, Wis.). Libby's (Libby, Chicago) | Sweet E & S | 15 15 | 81 85 ⁸ | | |
| Lily of the Valley (Snider Pack., | _ | | | Mission (Calif. Pack. Corp., San Francisco) | Sweet | 11 | 79 | | |
| Rochester, N. Y.) | Sweet | 15 | 90 | Monarch (Reid, Murdoch, Chicago) | E&S | 18 | 843 | | |
| Manhattan Quality 1 (Manhattan | | | | Nugget 1 (F. M. Wilson, San Fran.) | E&S | 14 | 818 | | |
| Groc., NYC) | Early | 25 | 92 | P&G (Paxton & Gallagher, Omaha) | Sweet | 18 8 | 77 | | |
| Nutradiet 1 (Nutradiet, San Fran.) | Early | 16 | 90 | Premier 1 (F. H. Leggett, NYC) | E&S | 18 | 84 | | |
| | | | 91 | Pad & White (Bad & White Com | Eas | 10 | 0.8 | | |
| S&W (S&W Foods, San Francisco) | E & S | 18 | 91 | Red & White (Red & White Corp., | T2 6 G | 10 | 0.0 | | |
| Beat 8 | | | | Chicago) | E&S | 16 | 83 | | |
| Grade B | | | | Reeves' Best (Daniel Reeves, NYC) | Sweet | 21 | 81 | | |
| (In alphabetical of | rdar) | | | Reeves' Quality (Daniel Reeves) | Sweet | 15 | 83 | | |
| | | 2.4 | 06 | Reliable 1 (A&P, NYC) | E&S | 12 | 85 | | |
| A&P 1 (A&P, NYC) | E&S | 14 | 86 | Rose-Dale (Libby, Chicago) | E&S | 13 | 85 | | |
| All Good (Ball Co., Oakland, Calif.) American Home (Nat'l Tea, | Sweet | 10 2 | 78 | Royal Scarlet (Williams, NYC) Shurfine (Nat'l Retailer-Owned | Sweet | 20 | 84 | | |
| Chicago) | E&S | 14 | 81 | Cross Chicago Netaller-Owned | Trans. | 20 | 0.4 | | |
| Argo (Calif. Pack. Corp., San Fran.) | Sweet | 13 8 | 78 | Groc., Chicago) | Early | 20 | 84 | | |
| Atlantic 4 (A&P, NYC) | Sweet | 8 | 77 | Snider (Snider, Rochester, N. Y.) | E&S | 13 | 82 | | |
| Avandala (Krosen Cincinnati) | Sweet | | 76 | Stokely's (Stokely, Indianapolis) | E&S | 14 | 84 | | |
| Avondale (Kroger, Cincinnati) | | 11 | | Success(Jacobson Shealy, San Fran.) | E&S | 14 | 78 | | |
| Blue & White (Red & White, Chi.) | E&S | 14 | 76 | Superfine (Chas. G. Summers, Jr., | | | | | |
| Bohack's 1 (Bohack Co., Brooklyn) | Sweet | 15 | 80 | New Freedom, Pa.) | Sweet | 19 | 77 | | |
| Bonnie Best 4 (Younglove, Tacoma) | Sweet | 13 | 86 | Sweet Life (Sweet Life Food, NYC) | Sweet | 13 | 83 | | |
| Briardale 1 (Briardale, San Fran.). | E&S | 16 | 86 | | Dweer | 10 | 00 | | |
| Cayuga (Hemingway, Auburn, N.Y.) Century (Sussman, Wormser, San | Early | 11 | 79 6 | Groc., Chicago) | E&S | 14 | 84 | | |
| Francisco) | E&S | 15 | 77 | Trupak 1 (Haas, San Francisco) Valley Prime (Minn. Valley Can., | Sweet | 14 | 82 | | |
| | T 0. 0 | 10 | 80 | Le Sueur, Minn.) | Sweet | 11 3 | 78 | | |
| Barrington, Ill.) | E&S | 12 | | Walla Walla 1 (Walla Walla Can., | | | | | |
| Co-op (East. Coop. Wholesale, NYC) | Sweet | 16 | 81 | Walla Walla, Wash.) | Early | 16 | 88 | | |
| Co-op i (Nat'l Coops., Chicago) | Sweet | 16 | 84 | Wellman (Wellman-Peck, San Fran.) | E&S | 15 | 84 | | |
| Cosmos (Sussman, Wormser, San | | | - | Westlake (Briardale, San Francisco) | E&S | 14 | 87 | | |
| Francisco) | Sweet | 11 | 81 | White Rose (Seeman Bros., NYC). | Sweet | 17 | 85 | | |
| Country Kist (Minn. Valley Can., | | | | | - | 13 | 78 | | |
| Le Sueur, Minn.) | E&S | 12 3 | 79 | Yacht Club (Reid, Murdoch, Chi.) | Sweet | 13 | 10 | | |
| Dellford (Middendorf-Rohrs, NYC) Del Monte (Calif. Pack. Corp., San | Early | 19 | 81 | Yellowstone (Paxton & Gallagher, Omaha), | E & S | 15 | 82 | | |
| E | E&S | 15 | 86 6 | | | | | | |
| Dodge (Haas Bros., San Francisco). | Sweet | 15 | 79 | Grade C | 7. | | | | |
| Economy (Equitable Cash Groc., | C | 10 | 00 | (In alphabetical e | oraer) | | | | |
| San Francisco) | Sweet | 10 | 80 | Brimfull (H. A. Marr, Denver) | E&S | 15 | 72 | | |
| Fame (Fame Can., Indianapolis) | E&S | 12 | 77 | | | 10 | 72 | | |
| Ferndell (Sprague Warner, Chicago) | E&S | 25 | 87 | Colonial (Garden, Evansville, Wis.) | | 10 | 72 | | |
| Fresh Flavor (Rogers, Milton, Ore.) | Sweet | 9 * | 81 | Gibbs & Co., Baltimore) | | 9 | | | |
| Freshpak (Grand Union, NYC) | Sweet | 14 | 83 | Iona (A&P, NYC) | E&S | 9 | 721 | | |
| Geneva 1 (Geneva Preserv., Geneva, | | | | Nu-Deal (Traverso, San Francisco). | Sweet | 11 | 76 | | |
| N. Y.) | Sweet | 11 | 83 | Plee-zing (Plee-zing, Inc., Chicago) | Sweet | 15 | 74 | | |
| Gerber's (Gerber, Fremont, Mich.). | Sweet | 13 * | 83 | Red Goose (Piggly Wiggly Corp., | | | | | |
| Gerbro (Gerber Bros., Brooklyn) | Sweet | 13 | 79 | Atlanta, Ga.) | Sweet | 9 | 76 | | |
| Green Giant (Minn. Valley Can., | | | | Saracen (Emery Food, Chicago) Sultana 6 (A&P, NYC) | Sweet | 13 10 | 69 75 | | |
| Le Sueur, Minn.) | Sweet | 16 3 | 87 6 | Dimente (AGE, NIC) | Latiy | 10 | 10 | | |
| Happy-Vale (Emery Food, Chicago) | Sweet | 11 | 78 | Cubates des | .2 | | | | |
| Hart (Roach, Grand Rapids, Mich.). Highway (Gen. Food Prod., Oak- | Sweet | 15 | 81 | Substandar | | | | | |
| land, Calif.) | Sweet | 10 | 82 | (In alphabetical | oraer) | | | | |
| | DH CCE | 20 | U-M | Mariposa (Calif. San. Can., Los | | | | | |
| Hi Ho (Minn. Valley Can., Le Sueur, | Q-mant | 10.1 | 02 | | Dried | 7 | | | |
| Minn.) | Sweet | 12 3 | 83 | Angeles) | - | 7 | * * | | |
| IGA (Indep. Groc. Alliance, Chicago) | Sweet | 17 | 78 81 | Pride of the Farm (Roberts, Phila.) Val Vita (Val Vita, Fullerton, Calif.) | Sweet . Dried | 10 | * * | | |
| Industry (Gen. Food, Oakland) | Sweet | | | | | | | | |

Cleaning Supplies

... for the bath and kitchen are many and various—principally because of the different materials involved. Sinks are usually resistant to alkalis, bathtubs to acids, aluminum to neither. Herewith a guide to products and uses

Technological advances have made the job of keeping house vastly more pleasant; at the same time, they have made it more complicated. The day is past when housewives could tell by looking at a thing what it was made of, or what should be done to keep it clean and in working order. And manufacturers haven't helped matters any with their pseudo-technical terms and advertising designed to impress consumers through the witchery of "science." When the house vife reads that "Old Dutch doesn't scratch . . . IT'S MADE WITH SEISMOTITE," her confusion may be excused, for "seismotite" is not even listed in Webster's International Dictionary. Her confusion may be confounded when she learns that "seismotite" is no more than another name for pumice, a hard abrasive.

Today, the housewife's kitchen sink—if it isn't one of the new rustless metal type—is usually made of vitreous enamelled iron (white glassy coating on iron base) while her washbowl, bathtub and toilet bowl are usually made of solid vitreous porcelain. They all look much alike; but for best results they require different cleansers. The problem is still further complicated by the fact that some manufacturers use porcelain in kitchen sinks and iron in bathroom fixtures—or porcelain or iron in both.

Household cleaning can generally be divided into three parts: the bath, the kitchen, and the rest of the house. Last month CU took up some of the problems relating to the rest of the house—the cleaning of paint, floors, windows and mirrors as well as general laundry. This month CU proposes to look into the kitchen and the bath,

The Kitchen

THE special tasks performed in the kitchen are washing dishes, scouring pots and, finally, deaning the sink

itself. For dishes, as CU pointed out last month, the most suitable cleaner in hard water is a soap with builder. For pots and pans, on which food may be burned or stuck, a metal pad and soap will usually be found most efficient.

For many years, housewives used metal meshes with interlinked rings, which were (and are) excellent for the old-fashioned heavy iron skillet and which may still be used for enamelware. Scouring powders of the milder type—like Pal-lo, Porcela, Vit, Bon Ami—may also be used with enamelware. But both meshes and powder were found much too harsh for aluminum.

Steel wool, therefore, in roll form (cheaper) or pad form (more convenient) appeared on the market particularly for aluminum ware. Its filaments have enough abrasive action to do the necessary cleaning and yet are fine enough not to scratch aluminum too deeply. Some scratching is necessary, since only in that way can polishing be accomplished.

But tiny slivers of the filaments from steel wool are likely to become embedded in the hands. Manufacturers began impregnating the pads with soap; such pads, housewives found, do a good job of cleaning and are, at the same time, far easier on the fingers. The soap forms a coating which has some lubricating action and which keeps the filaments from breaking off so easily.

A disadvantage common to both plain and soaped pads of steel wool is that they rust quickly, crumbling to a powder in the center where the water gets least chance to evaporate. If the pad could be dried out immediately after each use, its life might be prolonged.

But a more practical solution is a plating of copper, which, while it does not entirely prevent corrosion, delays it somewhat. Although the cost of this plating is slight and should not materially affect market price, copper-coated pads are considerably more expensive than the uncoated kind.

Pads made almost entirely of copper are also available. These do not splinter or rust, but since the filaments are heavier they seem more likely to scratch such soft metals as aluminum.

Ordinarily scouring powders, which are too abrasive, should not be used with aluminum. Steel wool and plain soap ought to give all the cleaning action required, but the milder scouring powders may be used occasionally without harm.

They should not be used with steel wool, however, and generally they will not be found as efficient as steel wool and soap. For pots and pans which have badly burnt food stuck to them, a harsher abrasive will usually be found necessary, even though deep scratches may result. Strongly alkaline cleaners (such as trisodium phosphate, or a scouring powder containing a large percentage of it) should never be used with aluminum, which is easily injured by alkalis.

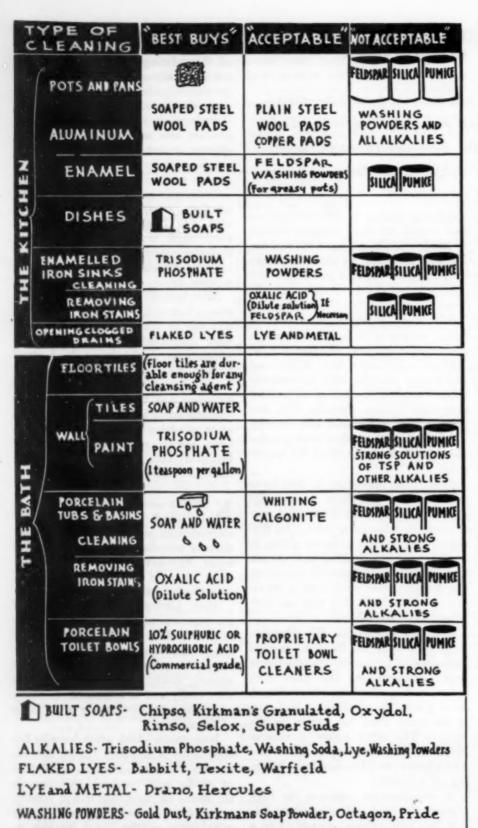
K ITCHEN sinks are usually resistant to alkali and can be readily cleaned with ordinary washing powders or trisodium phosphate and hot water. Also safe for occasional use on sinks are mild abrasives like whiting or a good metal polish.

Most kitchen sinks are made of vitreous enamelled iron, and the glaze is produced by heating the enamel to the point where it melts. Strong abrasives will quickly scratch this surface enamel, which, once roughened, stains very easily and is impossible to clean except by actually scouring away more of the surface.

of the surface.

Iron stains, which often form in the sink under a dripping faucet, are extremely difficult to remove. A solution of oxalic acid (poison) will remove the stains all right, but it will remove some of the enamel along with them; a scouring powder harsh enough to rub away the stain will rub away the glaze, too.

Rustless metal sinks should also be protected against water dripping continually at one spot; and abrasive cleansers should not be used. Generally, a soap solution such as is used



PROPRIETARY TOILET BOWL CLEANERS Eko, Skasol, Sani-Flush, Boyers

FILMMAN FELDSPAN (Tal-lo, Porcela BILKA SILICA (Bab-o, Babbitts, Kirk- PUMICE ABRASIVE Wit, Bon Ami ABRASIVE man's, Sapolio, Sunbrite ABRASIVE Cleanser

for dishes will be found safest and most efficient.

As noted before, some manufacturers of kitchen sinks are now using vitreous porcelain, like that most often used in bathrooms, which requires a different treatment. Although both types of sink look alike, the difference will be apparent on tapping the surface lightly with a spoon. Enamelled iron gives a metallic ring; glazed porcelain gives no ring, but a click. The latter should be cleaned in accordance with the suggestions given below for bath porcelain.

One further problem which occasionally arises in connection with the sink is the cleaning out of clogged drains. Flaked lye is most economical for this purpose.² It is sold under brand names as Babbitt, Texite, Warfield. &c.

After the sink strainer is removed, the lye flakes are poured directly down into the pipe and a little water run in; after a few minutes flush the pipe with hot water. Lye is very corrosive to the skin and clothing and great care should be taken not to splash it into the eyes. Lye deteriorates very rapidly on exposure to air and should be kept covered.

Other more efficient, but more expensive, compounds are available. Most of them, like *Drano* and *Hercules*, contain metal shavings—such as aluminum turnings—as well as lye. Here the lye reacts both with the accumulation in the pipe and with the metal, the more vigorous reaction helping to dislodge particularly stubborn masses of material. The powdered spice which manufacturers occasionally put into these openers—for a price—neither helps nor hinders their action.

The Bathroom

CONTRARY to advertising claims, most scouring powders now on the market may safely be used in the bathroom only for cleaning floor tiling, which does not have the high surface glaze of vitreous enamel and is made to withstand heavy wear.

Such scouring powders as Bab-O,

CLEANING POWDERS WITH:

¹ Or look at the underside of the sink; enamel is usually applied only on the top side.

² For porcelain washbowl drains lye should be used very carefully, if at all, as it will damage the porcelain immediately upon contact.

Babbitt's Cleanser, Kirkman's, Old Dutch Cleanser, Sapolio, and Sunbrite all contain too harsh an abrasive to be used safely on any surface less durable than floor tilings. Most housewives will find that the scouring powders which have milder abrasives like feldspar are efficient enough for this purpose and may be used on other surfaces, too.

Pal-lo, Porcela, Vit and Bon Ami all contain feldspar, a hard abrasive which, because of its physical form, is far less harsh in action than the silica found in so many powders or than the "seismotite" of Old Dutch. Instead of being rough-edged, feldspar particles occur as flat platelets, which tend to slide over the surface being cleaned much like the flat side of a knife. A powder with a feldspar base, therefore, will usually be a better buy, since it has more uses, than one with a crystalline silica or pumice base. (But Vit, it should be noted, contains a percentage of trisodium phosphate undesirably high for many uses.)

Wall tiles in the bathroom never present a serious cleaning problem, since they can be wiped off with a damp cloth or washed with soap and water for more thorough cleaning. For painted bathroom walls, a dilute solution of trisodium phosphate (one teaspoonful to a gallon of warm water) will be found effective.

Bathtubs and washbasins are usually made of vitreous porcelain, which, unlike the kitchen sink, is acid in nature. They can be safely cleaned with an acid cleaning agent but they will roughen when exposed to a strong alkali. Soap and water will often be sufficient; if not, a mild abrasive such as whiting may be used. For stubborn dirt, sodium metaphosphate (Calgonite) will usually be found to have an efficient and safe detergent effect.

Iron stains may be more easily removed from porcelain in the bath than from enamelled iron in the kitchen, since a solution of oxalic acid will remove the stains without affecting the porcelain finish.

For cleaning toilet bowls, a dilute acid solution is most desirable. Eko, Skasol and other proprietary products are essentially just such dilute solutions of hydrochloric acid sold at a premium under brand name. Sani Flush and Boyer's contain solid compounds which form acid in water.

A dilute (10%) solution of commercial sulfuric or hydrochloric acid, if available, may be substituted for the branded products at a saving. Use about one-half cupful each time. Unfortunately, 10% solutions are very difficult to procure; and more highly concentrated solutions, which are the ones generally sold at chemical supply houses, are far too dangerous for use by the housewife. Even a 10% solution should be handled carefully and should not be allowed to touch skin, clothing or metal.

SCOURING POWDERS

Acceptable *

* But for certain purposes only; see introductory text.

With Feldspar Abrasive

(Acceptable for enamelware, iron ware, floor tiles.)

Bon Ami (Bon Ami Co., NYC.). 12-oz. can, 12¢. Relatively safe and mild. Mostly fine feldspar.

Pal-lo (Pal Products Co., Brooklyn). 14 oz., 10¢. Feldspar, trisodium phosphate and soda soap. Content of trisodium phosphate considered low enough for safety.

Porcela (Porcela-Radax Co., Pittsburgh). 14 oz., 10¢. Feldspar, soda ash and soda

Vit (Detroit-Michigan Stove Co., Detroit).
Feldspar and trisodium phosphate. Content of trisodium phosphate considered undesirably high.

With Pumice Abrasive

(Acceptable for floor tiles, iron ware.)

Old Dutch Cleanser (Cudahy Soap Works, Chicago). 3 14-oz. cans, 25¢. Advertised as containing "seismotite"—a fancy name for pumice. Also contains soap and soda ash.

With Silica Abrasive

(Acceptable for floor tiles, iron ware.)

Sapolio Cleanser (Enoch Morgan's Sons Co., NYC). 13 oz., 12¢; 10-oz cake, 10¢. Crystalline silica with soap and soda ash.

Babbitt's Cleanser (B. T. Babbitt, Inc., NYC). 14 oz., 5¢. Crystalline silica, soap and soda ash.

Kirkman's Cleanser (Kirkman & Son, Brooklyn). 14 oz., 10¢. Silica, soda ash and soap.

Sunbrite Cleanser (Swift & Co., Chicago). 3 13-oz. cans, 10¢.

Octagon Cleanser (Colgate-Palmolive-Peet Co., Jersey City, N. J.). 13 oz., 5¢.

Red Devil Cleanser (B. T. Babbitt, Inc.). 3 13-oz. cans, 8¢. Bab-O (B. T. Babbitt, Inc.). 2 14-oz. cans, 25¢. Coarse silica and soap with large content of trisodium phosphate. Considered too drastic for most purposes.

TOILET CLEANERS

Best Buy

Dilute (10%) Solution of Commercial Hydrochloric Acid,

Also Acceptable

Sani Flush (Hygienic Products Co., Canton, Ohio). 1 lb., 6 oz., 22¢. Contains sodium acid sulfate, table salt and a mild abrasive.

Boyer's Toilet Bowl Cleaner (Boyer Chemical Laboratory Co., Chicago.). 1 lb., 8 oz., 25¢. Contains sodium acid sulfate.

Eko (Riddiford Bros., Chicago). Dilute hydrochloric acid colored with copper sulfate.

Skasol (Allied Engineering Products Co., San Francisco). Dilute hydrochloric acid. Colored with brown dye.

STEEL WOOL PADS

Acceptable

S O S (S O S Co., Chicago). 3 pads, 10¢. Impregnated with soap.

Brillo (Brillo Mfg. Co., Brooklyn). 5 pads, 10¢. Impregnated with soap. Pads not impregnated are sold with a small cake of scouring soap.

Brillo Utensil Soap. Single cake, 5¢. Contains pumice.

Supreme Steel Wool Balls (Brillo Mfg. Co.). 6 pads, 10¢; one large ball, 5¢. Sold in fine, medium and coarse grades without the soap cake and not impregnated

DRAIN OPENERS

Best Buys

Babbit Lye, Texite Lye, Warfield Lye and others. Usually priced at about 12¢ for 13 oz. Consist of plain caustic soda. These are the most economical products for the purpose.

Also Acceptable

Drano (Drackett Chemical Co., Cincinnati). 12 oz., 23¢. Contains lye and aluminum.

Hercules Drain Pipe Opener (Hercules Chemical Co., NYC). 12 oz., 19¢. Contains lye and metal.

Economy Plumber (Economy Plumber Co., NYC). 14 oz., 25¢. This is the same as the flake lye listed as "Best Buys," but sells for about double the price.

Canned Chicken Soups

There are no government grades or standards for canned chicken soup. But on the basis of group taste tests. Crosse & Blackwell was found to rank highest; Campbell's, which costs only about half as much per serving, was second choice

THERE are for chicken soups, unfortunately, none of the government grades or standards on which CU's price and quality ratings of canned foods are usually based. The accompanying ratings, therefore, are

based primarily on taste.

Taste is entirely a subjective factor. Two persons tasting the same sample of food may have widely different opinions of its flavor. The only ultimate standard for flavor is whether people like it. Nevertheless, by allowing a sufficiently large number of people to taste samples of certain foods, it is possible to get definite statistics on the flavor popularity of each.

On the basis of such statistics CU has rated 14 brands of chicken soups in order of popularity. Those individuals who find that their opinions differ from the preponderance of opinion here reported should follow the dictates of their own tastes. For the great majority of persons the ratings should be a useful guide.

Each brand of chicken soup covered in this report was tasted, under controlled conditions, by approximately 30 different persons. Each person gave his opinion, independently, of samples identified by code letter only. All samples were prepared according to directions on the labels, including dilution with water where this was recommended.

On the basis of flavor alone, Crosse & Blackwell's chicken-noodle soup

Percentage of Persons Price Cost Per Rating Each Brand as: Per Net 4-Ounce

59

101/2

1.71

ranked highest; 78% of the tasters rated it good, 22% fair, and no one thought it was poor. Second came Campbell's condensed chicken soup (with rice), with 65%, 32%, and 3%; third, Campbell's condensed chicken-noodle soup, with 59%, 33%, and 8%. In view of the small margin of preference for Crosse & Blackwell over Campbell's, and of the much lower cost per serving of the latter (see ratings), Campbell's could probably be considered as the "Best Buy" -provided that you like its flavor.

Besides the taste tests, all samples were strained to determine the relative amounts of liquid and of undissolved solid materials. The chicken and rice or noodles were then separated mechanically, and the condition and appearance of the solid material examined. In all brands, the chicken and noodles were found to be satisfactory; in all brands except Campbell's, the rice was found to be mushy.

The largest amount of solid chicken meat found was 4% in Campbell's (with rice) after dilution. Campbell's chicken-noodle contained 3% after dilution, and all other brands contained less than 3%. Those which contained no visible pieces of chicken were White Rose, Hormel, College Inn, Richardson & Robbins, Westchester, IXL. The amount of solid chicken meat present does not necessarily bear any relation to the strength of the liquid portion, but many people prefer soups with edible chicken.

Most of the soups tested were of the "ready-to-serve" variety, to be used without the addition of water. Of the four that were "condensed," only Campbell's (both noodle and rice) maintained a preferred flavor after dilution. Condensed soups are noted in the ratings below.

THE U. S. Dep't of Agriculture provides an optional inspection service for the chicken meat used in making soups. The service (paid for by the manufacturer) provides for continuous inspection at the factory by a qualified veterinarian of the Agricultural Marketing Service to determine that each poultry carcass used is free from disease and otherwise suitable for human food.

Manufacturers who use this service are permitted to declare on their labels: INSPECTED & CERTIFIED BY

Canned Chicken Soups-Price & Flavor Ratings Brands are listed in order of preference in flavor tests. Note also cost per serving.

| BRAND AND MANUFACTURER OR DISTRIBUTOR | Good (%) | Fair (%) | Poor (%) | Can (#) | Weight (or.) | Serving (é) |
|---------------------------------------|-------------|-------------|-------------|------------|-----------------|-------------|
| Crosse & Blackwell Chicken-Noodle | | | | | | |
| (Crosse & Blackwell, Baltimore) | | 22 | 0 | 13 | 161/2 | 3.2 |
| [with rice] (Campbell Soup Co. | | | | | | |
| Camden, N. J.) | 65 | 32 | 3 | 10 | 101/2 | 1.91 |
| Campbell's Condensed Chicken Noodle | 8 | | | | | |
| Soup | 59 | 33 | 8 | 10 | 1034 | 1.91 |
| Co-op Chicken-Noodle (Nat'l Coops. | | * | | | | |
| Inc., Chicago) | 48 | 41 | 11 | 13 | 16 | 3.3 |
| Heinz Chicken Soup with Rice (H. J | | | | | | |
| Heinz Co., Pittaburgh) | | 32 | 21 | 13 | 16 | 3.3 |
| Heinz Chicken-Noodle | | 34 | 21 | 15 | 16 | 3.8 |
| Westchester Chicken Broth with Rice | 8 | | | | | |
| (Pure Food Factory, "Hansa," Mama | | | | | | |
| roneck, N.Y.) | 33 | 41 | 26 | 10 | 13 | 3.1 |
| roneck, N.Y.) | h | | | | | |
| with Rice (Richardson & Robbins | | | | | | |
| Dover, Del.) | 30 | 50 | 20 | 14 | 1214 | 4.5 |
| IXL Chicken Broth with Rice (Workman | | - | | | /- | |
| Pack. Co., San Francisco) | . 18 | 41 | 41 | 8 | 13 | 2.5 |
| Phillips Condensed Noodle Soup with | | ** | ** | | 20 | |
| Chicken (Phillips Pack, Co., Cam | | | | | | |
| bridge, Md.) | 15 | 44 | 41 | 7 | 101/2 | 1.31 |
| White Rose Chicken-Noodle (Seeman | | | - | • | 20/2 | 2.0 |
| Bros., NYC) | 6 | 42 | 52 | 15 | 13 | 4.6 |
| Hormel Chicken-Noodle (Geo, A. Horme | | *** | 02 | 10 | 10 | 2.0 |
| & Co., Austin, Minn.) | | 54 | 44 | 14 | 16 | 3.5 |
| College Inn Chicken Broth with Ric | | 0.1 | ** | | 10 | 0.0 |
| (College Inn Food Prod. Co., Chicago) | . 7 | 28 | 65 | 7 | 121/2 | 2.2 |
| Lynden Egg Noodle and Chicken Sou | | 20 | 00 | | 14/2 | |
| (Washington Coon, Egg & Poultry | | | | | | |
| | | | | | | |

² When diluted with an equal amount of water.

Washington Coop. Egg & Poultry

Ass'n, Seattle).....

AGRICULTURAL MARKETING SERVICE, U. S. DEP'T OF AGRICULTURE.

This statement is rather misleading, since only the chicken (and not the whole soup) is inspected and certified, but certainly it affords some measure of protection to the consumer. Of the brands tested, only IXL failed to bear a statement of inspection.

Another government agency, the Food & Drug Administration, also offers the consumer some protection. The Administration requires that all brands containing monosodium glutamate be so indicated. The industry, which complies by marking such brands with the statement "Seasoned with a Wheat Protein Derivative," maintains it uses the derivative merely to bring out the natural chicken flavor. The F&DA, however, holds that this derivative (which gives the meaty flavor to Chinese soy sauce) is an artificial flavor and might be used to conceal inferiority in the soup.



SOLID CONTENT

... of two soups. Top, Campbell's; bottom, Westchester. Note difference in texture and quantity of rice; presence (and absence) of chicken

Flower & Vegetable Seeds

Have your soil tested; choose varieties adapted both to your soil and to your climate; confer with your State Experiment Station; and buy your seed from reliable sources — some of which are listed here

The way to test pudding is to eat it. The only way to test the real value of seeds is to grow the crop. Then, if you are disappointed, you may read your seedsman's "disclaimer" in his catalog. He will take no responsibility for the results, because of factors of weather and the like, over which he has, of course, no control. This disclaimer protects honest seedsmen from unreasonable claims; it also saves the dishonest and the careless from just retribution.

If the seed germinated poorly or not at all, it may have been old or dead; but you may have let the seedbed dry out just once. If the plants started all right but were struck with disease later in the Summer, the disease may have been in or on the seed when it was packeted; but it may have been already in your soil as the legacy of former diseased crops or it may have been brought to the plants by the wind or insects.

If the final flower or vegetable is disappointing, is not as prolific, as big, as uniform, of as fine quality as the catalog foretold, the strain of seed may have been poor or mixed; but, again, you may be an unskillful gardener, or disease or unusual drought may have ruined the quality, or maybe you ought never to have attempted that particular variety in your climate or in your type of soil.

Your best safeguard is to buy seed from reliable distributors (ratings of some accompany this article). Then, chances are if your crop is disappointing, the fault is either your own or your weatherman's.

You should have your soil tested by your State Experiment Station or County Agricultural Agent. And for that matter you should keep in touch with these stations; they can advise, on the basis of soil tests, about crops and fertilizers; they can give you information about seedsmen; they may have field trials, which you can inspect. Last year CU gave hints and counsel on particular vegetable crops, on planting and transplanting time, and the like. Readers are referred both to that issue (April 1939) and more particularly to pamphlets published by their State Extension Service. An excellent one, for example, is "The Control Calendar for Vegetable Pests," Extension Leaflet 116, published by the Massachusetts Agricultural Experiment Station at Amherst, Mass.

Meanwhile, here are a few don'ts and a few recommendations, based on the opinion and experience of expert consultants.

As it is used by CU, the term "quality" applied to seed means not merely seed with a high percentage of germination and freedom from weed seeds and excessive chaff. What is far more important, it refers to quality of strain. A superior strain of seed is seed which under favorable conditions, will produce vegetables or flowers all or very nearly all of which are true to a superior type of the variety named.

If you buy from the best sources their vegetable seed will be good by this high standard, but much of their flower seed will not. This is because farmers' requirements dominate the vegetable seed market, while amateurs buy most of the flower seed. Amateurs are gullible, are generally more interested in novelties than in quality, and the flower seed market is unfortunately organized on that basis. The best CU can do about flower seed, therefore, is to name a few seedsmen who seem to be trying with more than ordinary success to sell the best strains of seed obtainable.

The common type of gaily colored seed packet sold from commission boxes by merchants represents a branch of the business which has been particularly open to abuses. In a few States, such as New York, consumers are protected from the worst of these by good, well-enforced seed laws, and some seedsmen even packet two grades

Vegetable Seeds

Seedsmen are ranked for the consistent quality of their seed strains.

Best Sources of Supply

The following are recommended for their whole line:

Joseph Harris Co., Inc. (Rochester, N. Y.; stores in Syracuse and Buffalo, N. Y., Cambridge, Mass.). Superior strains. Specialties: beets, corn, muskmelons, peppers, toma-

Ferry-Morse Seed Co. (Detroit, San Francisco). Seed growers, considered the best commission packeters. Unless the local assortment includes all the varieties you want, ask to see the catalog, and order from that.

Abbott & Cobb (Philadelphia). Specialties: celery, lettuce, cucumber.

Eastern States Farmers' Exchange (Springfield, Mass.). All seed treated against disease. Low prices. Sells only in its territory: all New England, Maryland, Delaware, and all Pennsylvania except 13 counties bordering New York State.

Stumpp & Walter (NYC). Careful seed buyers.

F. H. Woodruff & Sons (Milford, Conn.). Specialities: corn, beets.

The following are recommended only for their specialties:

Robson Seed Farms (Hall, N. Y.). Hybrid corn.

D. V. Burrell (Rocky Ford, Colo.). Melons.

Glick's Seed Farm (Smoketown, Pa.). Tomatoes.

Livingston Seed Co. (Columbus, Ohio). Tomatoes.

Francis C. Stokes Co. (Moorestown, N. J.). Tomatoes.

Good Sources

Comstock Ferre Co. (Wethersfield, Conn.). Specialties: corn, peas, beans, onions.

F. W. Eberle (Albany, N. Y.).

Alexander Forbes & Co. (Newark, N. J.). Specialties: celery, cauliflower.

Fredonia Seed Co. (Fredonia, N. Y.). Commission packeters.

Peter Henderson (NYC). Specialty: cauliflower.

Vaughan's Seed Store (Chicago, NYC).

O. H. Will & Co. (Bismarck, N. D.). Varieties for a short growing season, and heat. Specialty: seed corn.

Not Generally Acceptable

(Some seed good, but in the opinion of CU's consultants, quality too variable at best.)

W. Atlee Burpee Co. (Philadelphia). Breck's (Boston).

W. E. Barrett Co. (Providence, R. I.). The great majority of city seed stores. The majority of commission packeters. "Collections" put up to sell at a low

of seed-one for the "fussy" States, the other for the unprotected. A brand of seed, therefore, which is acceptable in New York may be completely unreliable elsewhere. CU accordingly recommends only two commission packeters, although certain others are acceptable in well-protected States.

The assortment of seed offered in commission boxes is restricted to the popular varieties, which are not neces-Ask the sarily the most desirable. merchant if he can order other varie-

ties for you from the same seedsman. Don't buy any seed which is kept in a damp storeroom or displayed in a place which is sunny or very dry or open to the weather.

Choosing Varieties

The location of the seedhouse has nothing to do with the quality of seed, but any seedsman's range of varieties will probably be best suited to his section of the country. Some varieties are good almost anywhere; others are restricted in their range.

Your State home gardening bulletin will be helpful for its list of varieties adapted to your section, but it may not emphasize quality or it may be out of date. Ask your State Experiment Station to recommend superior varieties adapted to your growing conditions. Catalog descriptions, even when accurate, do not take local and personal requirements into account.

A good seedsman's specialties are likely to be particularly good strains, but don't buy novelties if you care about quality. Disease-resistant varieties are often inferior; don't buy them unless you have had trouble the preceding year. Sweet corn is an exception. If the temperature from January to March averages about 28° F., susceptible varieties will be attacked by wilt during the Summer.

The following varieties are recommended, particularly for their "eating quality," and have been checked for suitability to different parts of the country. However, the United States offers many widely different sets of growing conditions, so we suggest that you consult your State Experiment Station before making a choice.

Remember also that the best variety will produce a poor crop if the strain of seed is poor; that certain seasons are unfavorable to certain kinds of vegetables; and that no vegetable shows its true character unless it is well grown and picked at the right stage of tenderness. A good early variety, sown in succession for later crops, may often be substituted for an inferior later variety.

ARTICHOKE

Green Globe.

BEANS, GREEN POD

Stringless Green Pod (not "Giant Stringless Green Pod").

Tendergreen.

Georgia Pole (H. G. Hastings Seed Co., Atlanta). Excellent, late, drought- and heat-resistant.

BEANS, WAX POD Pencil Pod Black Wax.

BEANS, GREEN SHELL

French Horticultural. Good strains are

(It seldom pays the amateur to use legume-inoculants for beans or peas; consult your State Experiment Station regarding their use.)

BEETS

Crosby's Egyptian; Early Wonder. Plant in succession for later crops. Ohio Canner. Small, stands long. Long Season. Late; excellent quality, but poor appearance.

BROCCOLI

Italian Green Sprouting.

CABBAGE

(Buy hot-water-treated seed as insurance against disease.)

Golden Acre; Green Acre. Early, highest quality; plant in succession.

CONSUMERS UNION Reports



Savoy Perfection Drumhead. Late, very high quality; but will not head in hot weather.

CHINESE CABBAGE

CARROTS

Tendersweet.

CORN. SWEET

(Sweet corn is especially sensitive to climate and weather conditions, so consult your State Experiment Station as to suitable varieties. Also, ask them for a scheme for sowing for succession. Don't plant in single rows but in rectangular blocks for good pollination.)

The varieties below are listed in order from early to late.

Golden Gem.

Extra Early Bantam.

Carmelcross.

Marcross 6.13. Wilt-resistant hybrid.

Golden Bantam. Good strains are scarce.

Black Mexican. Ready several days before
the color turns, as well as afterwards.

Golden Cross Bantam. Wilt-resistant hy-

Golden Cross Bantam. Wilt-resistant hybrid.

Pearlcross (C. C. Hart Seed Co., Wethersfield, Conn.). Very late, wilt-resistant hybrid, somewhat resistant to the corn ear worm.

LETTUCE, HEAD

Cosberg; New York 515 and 12, Imperial 44 and 847, according to local requirements.

White Big Boston. Usually the most successful.

White Paris Cos (also called Romaine, Trianon). For head lettuce in cool weather, leaf lettuce in Summer.

MUSKMELONS

Honey Rock (Sugar Rock); Emerald Gem. Very early, for short seasons.

Aristocrat (Joseph Harris Co.). High quality; turns soft if left too long on the vines.

ONIONS

(Best from plants, and next best from "sets," rather than from seed, except where Summers are rather cool.)

Riverside Sweet Spanish.

Yellow Globe Danvers.

Ebenezer (Japanese). Usually from "sets."

Japanese Bunching. For "green" onions in Spring.

PEAS

(See note on "legume inoculants" under "Bean.")

Thomas Laxton.

Little Marvel. Very dwarf. Not good in sections subject to early drought.

Laxton's Progress.

Lincoln (Joseph Harris Co.). Probably the best, but seldom offered.

Giant Stride (Midseason Giant). Endures hot weather. Do not sow until

season is settled; Rogers Gilbo. Same group, may be sown early.

PEPPERS. SWEET

Early Giant. World Beater.

POTATOES, WHITE

(Buy only certified, northern-grown seed. Insist on the official State certification tag. "Selected seed" means nothing.)

Chippewa. Early. Green Mountain. Russet Burbank. Early Ohio.

PUMPKINS Winter Luxury.

RADISH

Scarlet Globe. Buy a selected strain, White Icicle.

SPINACH

Old Dominion.

SQUASH

Buttercup. Small, 3 to 4 lb.

Des Moines (Table Queen). Early, small, prolific, dwarf vines.

Golden Delicious.

A



SUMMER SQUASH

Cocozelle. Pick when six inches long. Excellent.

Early Prolific. The best yellow variety.

TOMATOES

(Buying State-certified seed is insurance against tomato diseases.)

Bonny Best. Early.

Marglobe. Blight-resistant, main crop. Comet. For training upright.

WATERMELONS

Honey Cream; Tough Sweet. For very short season localities. Wondermelon. Early. Stone Mountain.

Flower Seeds

On the whole, strains of flower seed have never been satisfactorily fixed. The ratings below merely give the relative standing of the firms listed, based on the quality of their strains.

Best Sources of Supply

The following can be generally recommended:

Joseph Harris Co. (Rochester, N. Y.; stores in Syracuse and Buffalo, N. Y., Cambridge, Mass.). Reliable. A very carefully selected list. Bodger's zinnias, pure stock.

Ferry-Morse Seed Co. (Detroit, San Francisco). Commission packeters. Their zinnias, petunias, and asters especially good. Ask to see catalog.

Stumpp & Walter (NYC). Very good list. Bodger's zinnias, pure stock.

Recommended for their specialties

—Annuals:

Richard Diener (Oxnard, Calif.).
Petunia seed grower.

Hart & Vick (Rochester, N. Y.). Excellent asters, Bodger's zinnias.

H. J. Ohms (Stamford, Conn.). Importer of good pansy seed.

Steele's Pansy Gardens (Portland, Ore.). Growers of superior strains of pansy seed.

Helen M. Tillinghast (Vernon, Conn.). Gourds, ornamental peppers.

Recommended for their specialties— Perennials (named varieties and rare kinds often do not come true to name): Carl Purdy (Ukiah, Calif.). Seeds of western wild flowers and rock plants.

Rex. D. Pearce (Merchantville, N. J.). Rare seed.

Vetterle & Reinelt (Capitola, Calif.).
Delphinium, excellent strains, somewhat mildew-resistant.

Lyondel Gardens (Morgantown, W. Va.). Famous strain of delphinium. English varieties tend to dark colors and are susceptible to mildew. Delphinium seed requires darkness for good germination; the largest seeds in a packet produce the strongest plants.

Good Sources

Henry A. Dreer (Philadelphia).

Fredonia Seed Co. (Fredonia, N. Y.). Commission packeters.

Peter Henderson (NYC).

George W. Park Seed Co. (Greenwood, S. C.). A long list including originator's strains and rare varieties. Packets 5 and 10 cents.

Vaughan's Seed Store (Chicago, NYC).

Not Acceptable

(Quality too variable at best.)

W. Atlee Burpee (Philadelphia).
Max Schling (NYC).

Trivett's (NYC).

Slipcovers

... may never look as good as upholstery, but they help protect it from dust and sunlight; they lend variety to the appearance of a room. Here are some guides for buying

ALTHOUGH expert craftsmen can do first-rate jobs, decorators seem agreed on the whole that slip-covering doesn't achieve the neat inviting look that a comfortable and properly upholstered chair has. Outside of that fact, there are a good many things to be said for slipcovers.

Good ones will protect the upholstery from dust, from much hard wear, and from fading in strong sunlight. They will permit a complete change in the appearance of a room; and they are particularly desirable in Summer, when the hard smooth fabric of a slipcover seems cooler and more comfortable than the heavier fabrics in which chairs are usually upholstered.

So popular, indeed, have slipcovers become in the last few years that the slipcover counters of department stores are stacked, Spring and Fall, with a bewildering array of fabrics. These the customer can purchase by the yard and make, or have made, herself, into covers; or she can have the store make them up for her into what are known as "custom covers." Ready-made covers are also available, of course, but rarely give a satisfactory fit and are very rarely preshrunk.

Some decorators even go so far as to suggest that furniture be bought in the "muslin," without any upholstering fabric at all, and that changes of slipcovers be used at different seasons of the year. Unless special heavy "muslin" is used, CU does not believe this to be in the best interests of long furniture life. The muslin itself is generally not strong enough for the top fabric, and the outer upholstering material helps to keep springs, batting and stuffing in place.

In an effort to dispel some of the confusion on which the institution of slip-covering seems to thrive, CU has shopped the retail market, obtained representative samples of some of the most widely used fabrics. The following information is based on tests made on these samples and on expert opinion.

Almost any fabric which is not transparent can be used in the making of slipcovers if it is both strong and serviceable. Most widely used, however, and those found in almost all stores that do slip-covering, are:

Chintz—a fairly thin but firmly woven fabric, either in solid color or printed design, usually finished with a glazed or shiny surface. This finish may or may not withstand washing, depending on the materials used in applying the glaze. The finish in the cheaper grades is usually not of the permanent variety.

Crash—a rather coarsely woven fabric with uneven yarns and texture, in solid colors or print design, made of linen or cotton, or mixtures of both. It may ravel in washing.

Cretonne—a printed fabric of linen or cotton in all varieties of weaves and finishes. Some chintzes come under this heading.

Homespun—a bulky fabric of cotton in rough-textured weave and surface, but soft to handle. It usually is not washable, because of shrinkage.

Muslin or sheeting—a plain cotton fabric, fairly thin and light in weight, used only in the cheaper grades.

Sailcloth — a lightweight canvas type of fabric, tightly woven and very strong.

"Dustite," "Dustone," and the like are terms used to designate tightly woven fabrics, either solid colors or prints, which are less porous than the average fabric, and thus protect the furniture against dust.

In addition to these, many other fabrics are used, but less widely: poplins, reps, whipcords, cotton damasks; even pillow tickings, corduroy, velveteens, quilted chintz and mohair.

THE tightly woven fabrics of the sailcloth, dustite and heavy cretonne varieties are most serviceable. The other fabrics, with looser and fancier weaves, either catch easily or allow dust to pass through; some of them do both. But their appearance will outweigh, for many people, these shortcomings.

Two other important factors to consider are the resistance of the color to washing and sunlight and the resistance of the fabric to shrinkage. If you intend to launder your covers and if they are to be exposed to sunlight, insist on a written guarantee.

Although many manufacturers use selvage markings to denote washability and resistance to shrinkage and sunlight, it is still advisable to get a written guarantee for the finished covers. The selvage markings are based on spot tests, not on tests of the individual cut, and do not cover whatever trimmings may be used. Some fabrics cannot be guaranteed washable; these should be guaranteed drycleanable and resistant to shrinkage under steaming or ironing. CU found that it was possible to obtain such fabrics.

In addition to the fabric itself, the trimmings should be chosen carefully. Very often consumers take the necessary precautions about the fabric and then disregard the trimming. After the chair is made up, they may find

Approximate Yardage and Labor Costs

THE yardage figures below allow for cord welted seams and box pleated skirts.

The workroom requires two yards of material in addition if the welting is to be made of the same fabric.

Labor cost is strongly influenced by the location and reputation of the maker. The estimates here are the result of a spot survey.

| YARDS OF | APPROXIMATE LABOR COSTS (\$) (IN CITIES AND | |
|----------|---|---|
| 7. | | LARGE TOWNS) |
| | | 23.00 |
| 13-14 | 18-19 | 12.50 |
| 71/2 | 101/2-11 | 10.00 |
| 8 | 11 | 10.00 |
| 7 | 91/2-10 | 10.00 |
| 9-11 | 13-14 | 12.50 |
| | 7ARDS OF 50" Width 28-30 13-14 71/ ₂ 8 7 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ |

that the trimming has faded in sunlight or, in the first washing, has run so badly that the cover is ruined.

If it is impossible to get a written guarantee as to colorfastness and shrinkage, it is advisable to wash a sample of the material to note fading, if any, and to have the entire material laundered before cutting to minimize further shrinkage.

Construction

No matter how good the fabric, a slipcover can easily be spoiled by faulty or skimped construction. It should fit smoothly, but not tightly, since even preshrunk fabrics will show some additional shrinkage when laundered.

When the cutter from the slipcover workroom comes to your home to cut your covers on the furniture itself, be sure that patterns are matched and centered on your furniture. Centering of floral motifs and stripes, matching of plaids and patterned designs across stitch lines, are extremely important if the finished cover is not to look like a patchwork quilt. Seam allowances should be ample, especially in loosely woven fabrics.

Inquire around among your friends. Find those who have well-fitted covers and get the craftsman they used. It is the best way to insure a good fit.

If possible, have zippers with fastcolor tapes used for closure. The additional expense involved is justified by the improved appearance and fit of the covers.

The cost of slipcover fabrics and of trimmings varies widely, and no generalization can be made. Some fabrics were found at 19¢ per yard and special patterns and designs in certain instances were found as high as \$5 per yard. Trimmings in the popular price range may vary from 5¢ to 75¢ per yard. Quality of base fabric, the degree of fastness of the color, the method used in preshrinking, and (by no means least important) the "exclusiveness" of the pattern, all play an important role in deciding what the price per yard shall be.

As for colorfastness—although again it is difficult to generalize—50¢ per yard at the normal retail price is probably the minimum for which a serviceable slipcover fabric with satisfactory colorfastness can be obtained.

Children's Camps

... can do a lot for your child—or to him. Here is a discussion of things to look for, a list of questions to get answered before making your selection, a check list of State Regulations

by WILLIAM S. RESNICK

"Things are seldom what they seem Skim milk masquerades as cream" —H.M.S. PINAFORE

THE little ballad in Gilbert and Sullivan's well-known operetta does not apply to every Summer camp, but wise parents will adopt Buttercup's ditty as their theme song when they begin looking for a children's camp.

Unfortunately, in some Summer camps, things are seldom what they seem; skim milk masquerades as cream; fly-breeding privies masquerade as "the most up-to-date sanitary conveniences"; former butchers and bakers, now camp directors, masquerade as "prominent educators." Children may come home sickly and underweight—for lack of proper food and rest. Timid children may come home generally upset—for want of a properly trained, sympathetic counsellor.

These are extreme examples of what can and does happen in the improperly constructed and badly supervised camp. More often, parents find a camp where the educational and physical facilities seem fairly adequate, a camp where the deficiencies appear to be of a relatively minor character and therefore unimportant. Few parents will think to inquire about the dish-washing facilities or the firefighting equipment or the average salary of counsellors; most parents are

simply unaware of many of the important factors that help to make a good camp.

This unawareness of parents results in negligence on the part of many camp directors, who will postpone making certain improvements because they know that parents will not realize the need for them. The caliber of counsellors in many camps is low because parents have not demanded more competent persons.

What jobs can the Summer camp do? The answer to this question depends largely on what parents want for their children. In brief, the chief features a camp has to offer are these:

 A safe, attractive place where children will be healthy and happy—away from their parents.

2. An opportunity for city-bred children to experience and enjoy the varied activities and interests associated with non-urban communities—in farm, mountain or coastal

3. An opportunity to play and live with their contemporaries.

4. A therapeutic experience by means of which social difficulties, speech defects, neurotic fears, abnormal shyness and the like may be partially or completely overcome.

It is important that parents realize what they want accomplished before they attempt to choose a camp. More than any other type of "product," a camp must be suited to individual needs. The fact that a camp is good for one child does not mean that it will be good for another. Unlike canned goods, radios or automobiles, the values of camps cannot be standardized.

How to judge the value of a Summer camp. Once you know definitely what you expect from a camp, certain procedures will help you find the camp that will serve you best. These procedures cannot be foolproof; they will not give you a ready-made answer to your camp problem. But they can provide you with information to help you make a decision.

Your first job, of course, is to find a camp with the proper fee, geograph-

Correction

In Consumers Union Reports for March 1939, Aimcee White Floating Soap and Fairy Soap were rated "Not Acceptable" because of excessive free alkali. The distributors of Aimcee recently offered reports of analyses showing no excess of free alkali. CU is pleased to report that its own analysis of a new sample confirmed the distributors' claim.

A new sample of Fairy Soap has also been analyzed and has been found to meet the Federal Specification limit for free alkali.

| State R | Regulation | of | Summer | Camps |
|---------|------------|----|--------|-------|
|---------|------------|----|--------|-------|

| STATE | WHERE TO WRITE FOR INFORMATION | ELEMENTS OF CAMP SANITA- TION SPECIFICALLY COVERED BY STATE REGULATIONS | OTHER INFORMATION |
|----------------|---|--|---|
| California | Commission of Immigration & Housing, Sac- ramento. | Sleeping quarters, kitchen, bathing and toilet facilities, garbage and drainage, beds and bedding. | Thorough inspec- tions. Permit re- quired for motor- boat. |
| Connecticut | State Board of Health, Hartford. | Water supply, toilet facili- ties, sewage disposal, gar- bage disposal. | No permit required Camps are rated. |
| Indiana | State Board of Health, Indian- apolis. | Garbage disposal, water supply, sewerage, drainage, waste water, swimming area, food, sleeping quar- ters. | Regulations also cover d i s e a s e kitchen and dining room equipment License is required. |
| Kansas | State Board of Health, Topeka. | | License is required. |
| Maine | State Dep't of Health & Wel- fare, Augusta. | Water supply, sewage and garbage disposal, living quarters, bathroom facilities, cleaning, milk, kitchen, staff. | License is required Camps are rated Thorough inspec- tions are made per- iodically. |
| Maryland | State Board of Health, Annapolis. | Water supply, toilets, sewerage, foodstuffs, gar- bage, disease. | Permit is required. |
| Massachusetts | State Board of Health, Boston. | Water supply, sewage disposal. | License is required. |
| Michigan | State Health Dep't, Lan- sing. | Passas | Certificate is issued giving rating. |
| Minnesota | Local Health Officer of town or county. | | Inspections made. |
| Nebraska | State Board of Health, Lincoln. | Food, disease. | Permit required. |
| New Hampshire | State Board of Health, Concord | Water supply, sewage and garbage disposal, drainage, disease, waste water. | License is required. Thorough inspec- tions. Rating will be given. |
| New Jersey | State Board of Health, Trenton. | Drainage, water pollution, toilets, garbage disposal, water supply, milk supply, food handling, disease. | Camps must register. If possible, make personal inquiry to State Dep't. of Health. |
| New York | State Dep't. of Health, Albany. | Water supply, sleeping quarters, ventilation, fire protection, milk and food, kitchen, toilets, sewerage. | Regulations cover drainage, supervision of children, swim- ming area, disease. Permit required. |
| North Carolina | State Board of Health, Raleigh. | Drainage, food, kitchen and dining-room, disease, sleep- ing quarters, sewerage. | Inspection and rating given. |
| Ohio | State Dep't. of Health, Columbus. | Drainage, water supply, toilets, sewage disposal, garbage disposal, water pollution. | Permit required. Inspections made. |
| Pennsylvania | State Dep't. of Health, Harrisburg. | Water supply, toilet facili- ties, sewage disposal, ven- tilation. | Bathing place permit required. Certificate of approval granted to certain camps. |
| Rhode Island | Public Health Commission, Providence. | Water, milk and food supply, waste disposal, ventilation, swimming pool. | Permit required. Complete inspection. |
| Vermont | State Board of Health, Montpelier. | Water supply, drainage, sewage disposal, ventila- tion, food, food handling, disease. | License issued. Inspection. |
| West Virginia | State Dep't. of Health, Charleston. | Drainage, water supply, sewerage. | Permit required. |
| Wisconsin | State Board of Health, Madison. | Water supply, toilets, food, kitchen, waste disposal, bathing beaches, sleeping quarters, disease. | Report must be made to State Board of Health. |

ical location, size, &c. The recommendations of friends or teachers, various newspaper and magazine camp departments, commercial and educational camp agencies can put you in touch with camps having the fundamental requirements.

Your next step is to write for the literature of several camps and pick out those that come close enough to your ideal to warrant further investi-

gation.

Then look for information at two sources: first, the State or local health department which supervises the sanitation of the camp; second, the camp director, counsellors, parents and others who have had relations with the camp.

Most States in which there are large numbers of Summer camps have enacted legislation providing for the supervision of health and sanitation. A growing realization of the dangers of primitive or badly planned systems of sewage disposal, water supply and food protection has resulted in more rigorous inspection and enforcement of camp sanitation laws.

Because this phase of public health is comparatively new, however, it is not safe to assume that all camps have adequate sanitary facilities. It is suggested that you write to the proper health department and ask the follow-

ing questions:

- 1. (In those States in which a permit or license is required before a camp may operate.) Does Camp ———— have a license or permit?
- 2. Has Camp ——— ever violated any of the regulations of the Sanitary Code? Give details.
- 4. What aspects of camp sanitation do your inspectors investigate? (Many camp inspections are quite cursory. See the accompanying table for points which complete inspections cover.)
- 5. In general, how is proper sanitation maintained at Camp —— ?
- 6. (In those States in which camps are rated.) What is the rating of Camp ———? Upon what standards are your ratings based?

The accompanying table lists the departments responsible for the supervision of camp sanitation, the features of camp sanitation specifically covered by State law, and other miscellaneous information. If you are interested in a State not mentioned in the table, write to the Department of Health of that State.

A satisfactory report from the Health Department may indicate that the camp you are investigating is sanitary, but it will rarely indicate whether the camp is comfortable. Remember that a properly constructed pit privy can be as sanitary as a flush toilet and that a health permit is no guarantee of running hot water. Few States will report details of this kind, and parents must go elsewhere for such information.

The camp director. The chief source of information about any camp must be its director. He is the camp; and choosing a camp without knowing him is extremely unwise. When you send your child to camp you are entrusting his health, safety and happiness to the director; before doing so, you should have confidence in his ability and honesty.

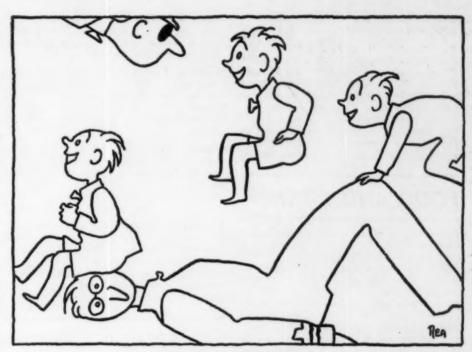
Obviously every camp director is enthusiastic about his organization and his descriptions will be colored by that enthusiasm. Unfortunately, some camp directors are better salesmen than they are educators, better actors than leaders. By your interviews with the camp director, you must judge whether he is all he appears to be, whether his camp is what he says it is.

The following points are suggested as a guide to all inquiries. Questions based on them will serve several purposes; they will indicate important aspects of the director's philosophy of management and education; they will expose certain pertinent facts rarely acquired by parents; and finally they will provide a check on the generalized statements made by the director.

Camp activities, religious observance, tutoring, and other special aspects of camp life have been omitted intentionally—not because they are considered unimportant, but because investigations of such matters are governed entirely by personal considerations.

HEALTH & SAFETY

Physicians. Most desirable is a full-time resident physician. Avoid, if possible, internes with little or no camp experience. If a part-time non-resident physician is used, it is important that he be within easy reach



FOR YOUNG CHILDREN:

At least one counsellor to every three

in case of emergency and that the camp nurse be well qualified. Have your personal physician check on the reputation of the camp doctor, if possible.

Nurses. Any registered nurse (not a "practical nurse") should be qualified for work in a camp. A full-time nurse with pediatric training is desirable.

Physical Examinations. Procedure at camps having a small incidence of illness includes the following: a detailed medical report from the child's home doctor; a thorough examination upon the child's arrival at camp, at which time the camp physician's findings are checked against the home doctor's report; periodic examinations—at the discretion of the camp doctor—of those children with abnormal conditions, allergies, sinus ailments, heart conditions, abnormal weight, &c.; and a thorough examination before the season ends.

Health Routines. The common cold and its variations are most frequent illnesses at camp. There must be some efficient daily routine whereby children with coughs, sniffles, running noses, &c., are segregated and treated promptly. Such a routine should involve daily examination, especially of throat and nose, by the nurse or doctor, not by counsellors. In many camps it is the counsellors' responsibility to report colds or other illness; but in most cases, they are not competent to bear such responsibility.

Emergency Treatment. Of primary importance is the availability of the nurse or doctor. First-aid kits, periodically inspected and restocked, should at all times be available at the waterfront, riding area, rifle and archery ranges and on all trips out of camp grounds.

Weight Changes. Many camp directors excuse a general decrease in the weight of

their campers during the Summer months with the explanation that the increased activity of children at camp is a perfectly normal cause of decreased weight. True, such a decrease may be normal, but it is not desirable. Too often children need a two-week vacation after a season at camp. In a good camp the change from the less active life of the city to the more active one of a Summer at camp is accomplished so gradually—with sufficient increases in food and rest—that the child will gain weight at a normal rate. Be suspicious of any camp where the average weight of campers decreases.

Fire-fighting Equipment. Very few States require fire-fighting equipment of any kind, although the danger of fires in camps is great, because of the inflammability of wood cabins, tents, trees, &c., and because of the difficulty, in most camps, of getting large supplies of water quickly. It is imperative that all camps be properly supplied with fire extinguishers, fire buckets, or hoses with water under sufficient pressure.

SAFETY IN ACTIVITIES

Swimming. Be especially concerned where swimming areas are in rivers or the ocean—treacherous currents, undertow, surf can be dangerous. Make sure the swimming area is well marked off, that the bottom is clean, not muddy or covered by debris or sharp rocks, that there are no deep holes or swampy areas. The head swimming coursellor should be a Red Cross Water Safety Instructor, his assistants should be Red Cross Senior Life Savers or their equivalent. Some definite routine should be enforced whereby there are periodic checks on every

camper during the swimming period. A LIFE GUARD SHOULD BE ON DUTY AT THE WATERFRONT AT ALL TIMES.

Horseback Riding. Riding has been the source of many severe accidents at camp because of improper supervision. Cavalry school graduates, professional riding masters, or graduates of riding schools who, besides their experience with horses, have had some past experience and training in the care and guidance of children are best suited to supervise riding at Summer camps.

FOOD AND KITCHEN

Purchase of Food and Planning of Menus. There should be a trained dietician for these duties. If possible see specific menus of past seasons. Although examination of the past seasons' menus can help you judge how well balanced the diet is, no questions you can ask the camp director will assure you of the quality of the food; this can only be determined when you visit the camp. On your visits eat with the children—not with the director—because some camps serve special food to the director and the guests. Keep an eye out for an overabundance of canned foods, artificial fruit juices, cheap cuts of meat.

Dietetic Supervision. Children who are underweight or overweight or who suffer from allergies should have special dietetic supervision by the doctor as well as the dietician. Infirmary patients should have special supervision, with special menus available for them, if necessary. One of the best ways to provide extra nutrition, needed because of added activity, is between-meal feedings. Many camps provide milk, crackers, fruit, &c. at intervals during the day or evening. Such routines are desirable.

Personnel. All members of the kitchen staff must be thoroughly examined by a physician. Some States have regulations requiring such an examination. There should also be periodic examinations by the camp physician for colds, intestinal ailments and infectious diseases.

Equipment. It is important that all kitchen and dining utensils be sterilized as well as washed. (Some States require sterilization.) This may be accomplished either by very hot water (170 degrees and up) or by means of an antiseptic rinse.

LIVING CONDITIONS

Sleeping Quarters. If tents are used, be sure they are on a wooden platform raised from the ground (required in some States). Cabins or dormitories are preferred for small children; tents are satisfactory for older children. In all cases, make certain that living quarters are completely weatherproof. Find out how many children sleep in one room. Minimum requirements in Maine call for 400 cubic feet per child; in New York, 30 square feet. These are minimum requirements, more space is desirable.

Hot Water. Good health requires cleanliness, and cleanliness requires hot water—lots of it—available at least at the rising hour, at noon and at bedtime.

Washing Facilities. At least one washstand and shower for each 10 children are minimum requirements. More are, of course, desirable. There is less need for bathtubs, but there should be at least one in the infirmary.

Toilets. Flush toilets are, of course, most desirable. More primitive toilets can be quite sanitary, but parents have a right to expect modern sanitary facilities. Some States require one toilet for every 15 persons. One to each seven or eight is more desirable.

Heating Facilities. There should be some provision made for cold damp days. There have been Summers, especially in New England, when there were two rainy days for every sunny one. There should be at least one large building which can be kept warm during cold wet weather.

EDUCATION

Aims. Ideally these would be in complete accord with the educational ideas of the parent. Certainly, you should send your child to a camp where the objectives are similar to your own. Aside from any special considerations of importance to individual parents, every camp director should evidence some conception of the benefits which a camp can offer beyond those of health and comfort.

Director. Be suspicious of persons who, until very recently, have not been engaged in educational work. Too many camp directors are former businessmen, with little or no educational experience, who look upon a Summer camp as a good investment or as an easy way to "get rich quick." Investigate fully the formal training of camp directors as well as their past experience in camping, teaching and related work. Investigate their reputation as an educator among their fellow educators. The importance of your camp director cannot be over-emphasized.

Bibliography

For parents who are contemplating sending their children to Summer camps, these books may prove of interest:

"Digest of Laws Affecting Organized Camping." Compiled by Roy A. Vetter and Julian H. Salomon. National Park Service, U. S. Dep't of Interior, Washington, 1939. Free.

Interior, Washington, 1939. Free.
"Summer Camps, A Guide for Parents." Edited by Beulah Clark Van Wagenen. Child Development Institute, Teachers College, Columbia University. New York. 254

University, New York. 25¢.

"Creative Camping," by Joshua Lieberman. Association Press, New York. \$2.

"Camping and Guidance," by Ernest Osborne. Association Press. \$2.

COUNSELLORS

Number. There should be at least one counsellor to every five children, and for young children under seven, at least one counsellor to every three. These figures apply only to senior counsellors.

Background. College graduates in their middle twenties or older with several years' experience as camp counsellors or teachers are most desirable. Be suspicious of a counsellor staff made up largely of college students in their teens or early twenties. Such young persons may be extremely personable and competent in various skills, but their lack of maturity and adult experience with children can have serious consequences. Such counsellors are usually underpaid and therefore look upon their Summer work as an inexpensive vacation rather than as a responsible job.

Salary. The answer to this question will help to indicate the caliber of the counsellors. Average salaries should be \$100 or more; they may range upward from \$75 for the season. Obviously a higher paid staff is desirable.

Length of Service. Be suspicious of any camp director who has a staff largely made up of counsellors new to his camp. It may indicate that he has not paid his counsellors in past years; that he works them too hard—thereby lessening their patience, sympathy and understanding of the children in their care; or that he has an unpleasant personality which makes for difficulty in working with him. Whatever may be the cause, a camp full of new counsellors probably indicates that the previous counsellors have not been satisfied; such a situation cannot be desirable for your children.

MISCELLANEOUS

Reports to Parents. A conscientious director will send periodic reports, written either by himself or by the counsellors, on the welfare of your child. These reports should indicate the health of the child, how he is adapting himself to his companions and surroundings, what activities interest him, how he is solving his problems, &c.

Visitors. To many camp directors, visiting parents constitute a general nuisance, upsetting camp routine, asking too many questions, making senseless complaints and undoing whatever good work the camp may be doing. A more desirable attitude is that of directors who encourage parent participation in camp activities.

Discipline. Many camps profess a self-discipline organized and administered by the children. But, too often a dictatorship of director or counsellors exists under which the basic reasons for discipline are lost. Make certain that the camp director's ideas on discipline coincide with your own, and remember that disciplinary measures should take an educational form, not serve as an instrument of revenge.

MEDICAL SECTION

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CU's Medical Consultants give technical advice on matters of medicine which lie within their fields. CU is responsible for all opinions concerning social, economic and public health questions.



The Sources of Trichinosis

... have been known for years, along with a solution to the problem that neither hog raisers nor municipalities have so far elected to use. And the disease, meanwhile, remains a major menace

Last month CU pointed out the amazingly high incidence of trichinosis in the United States; apparently, some 23,000,000 Americans carry in their tissues the parasites which cause the disease. Infected pork, it was also pointed out, constitutes almost the only source of infection for man.

Swine become infected with Trichinella in exactly the same way that man does—by eating raw or improperly cooked meat containing the live parasites. There are three ordinary sources of such meat in the hog's diet: offal from the slaughter houses; garbage containing scraps of pork; infected rats that may be caught and eaten by the animals.

Offal used to be a major source of trichinosis in hogs, but use of slaughter house refuse in feeding has greatly decreased, according to the late Dr. M. C. Hall¹ of the U. S. Public Health Service. Rats, which abound in many piggeries, are not an important source of trichinosis today. For, while occa-

sional hogs may at one time or another catch and eat a rat, they don't prefer them as a regular article of diet.

The evidence which implicates the feeding of uncooked garbage is, however, impressive.

Where hogs are raised primarily on grain (as in the Middle West), or are allowed to root for themselves in pasture, fields and woods and may later be fattened on peanuts (as in the South), the incidence of trichinosis is very much lower than where hogs are fed almost exclusively on a diet of garbage and swill (as on the East and West Coasts). And, as might be expected, eastern and western hogs are afflicted not only with trichinosis, but also with a higher incidence of other diseases (tuberculosis, undulant fever, hoof and mouth disease, hog cholera, &c.).

The existence of a serious problem resulting from trichinosis in swine was recognized in 1875 by Dr. George Sutton, a talented, patient and persistent doctor of Aurora, Indiana. Working with a crude microscope Dr. Sutton examined samples of muscle from 1,000 hogs raised in Dearborn County in his home State (in those days even Middle West hogs were raised on other things than corn, particularly

offal). He found 9.6% of the hogs infected.

Since then 65 years have passed—time enough for hog raisers to take Dr. Sutton's early findings to heart. Did they? Fourteen years later, in a study made on offal-fed hogs in Boston, 18% were found to have trichinosis. But grain-fed hogs from the Middle West showed only a 2% incidence. The next year in Iowa from 8.3% to 10% of hogs raised on offal were found to be infected. Thus a practical solution to the trichinosis problem was demonstrated 50 years ago—that is, to feed hogs grain instead of infected meat scraps.

In the Middle West, where corn is abundant, this was done by the vast majority of hog raisers and today only from 1% to 1½% of grain-fed hogs are infected with the *Trichinella*. It is more than probable that scrupulous care—to prevent hogs from having access to garbage at any time and to eradicate rats near pigsties—would reduce this incidence almost to zero.

But present-day examination of garbage-fed hogs tells a different story. In various surveys made in the last few years, from 4.4% to 10% of hogs fed on uncooked garbage were found to have trichinosis.

The hazard of garbage feeding is further illustrated by the occurrence of clinical cases of trichinosis (serious infections diagnosed during the acute stage of the disease and reported to the local health departments) in different parts of the country. The greatest number of cases of trichinosis in human beings occurs in those communities where garbage is disposed of by feeding it to hogs.

And for this the municipalities themselves are chiefly responsible. Said W. H. Wright, Zoologist of the National Institute of Health:

cities . . . dispose of garbage by feeding it to swine and . . . this method is employed more frequently than is any other single method of disposal. . . American municipalities either directly or indirectly are the largest feeders of raw garbage to swine and are therefore chiefly responsible for the dissemination of trichinosis. Many hogs maintained on municipal garbage are slaughtered locally, and many cities are thus contributing indirectly to the ill health of their own citizens . . . geographical areas in which many hogs are raised on garbage are the areas having the most clinical trichinosis . . . For instance, the Pacific Coast States, in which 82.8% of the cities . . . dispose of

¹ "The Past and Present Status of Trichinosis in the United States, and the Indicated Control Measures," by Dr. M. C. Hall, Rep. No. 1975, Public Health Reports, August 19, 1938. Available from Sup't of Documents, Washington, D. C. 5¢.

garbage by feeding it to swine, have the highest morbidity rate of any section. The New England States, with the next highest morbidity rate, leads all other geographical areas in the number of cities using the hog-feeding method of disposal.

Many cities use more sanitary methods of disposing of their garbage—by converting it into fertilizer and fats with high pressure steam cooking, by incineration, by grinding and flushing into the sewers. Withdrawal of garbage from pig-raising establishments would force the use of some other source of feed; and, since nothing else available could be less sanitary than garbage, an improvement in the health of the swine would follow.

Even so, it is not necessary to dispense with garbage feeding if the refuse is first cooked thoroughly to a temperature high enough to sterilize it. *Trichinella spiralis* dies when heated to 137° Fahrenheit.

Hogs fed on cooked garbage have been examined and only slightly more than ½ of 1 per cent were found to have trichinosis—a tremendous reduction from the figure for swine fed on untreated garbage.

Experience indicates that hog raisers now using garbage cannot be depended on voluntarily to cook it, as the process increases costs slightly. This fact is somewhat surprising in view of the fact that the added cost would be more than repaid by the better health of the animals and the increased price such hogs would bring on the market. But only where governmental authority has been used to prevent the feeding of uncooked garbage (as in Iowa and Kentucky) has any advance been made.

Knowing that from 0.5% to 10% of hogs in this country have trichinosis, how much of the pork and pork products on the retail market contain live Trichinella? Fortunately, a considerable amount of the trichinous pork that is slaughtered is non-infectious by the time it reaches the consumer. Some of it is heated sufficiently in processing, some of it refrigerated at 5° F. for 20 days, which also kills the trichina, some of it treated in other ways in the packing plants. But plenty of infectious pork is nevertheless sold over the counter.

In a recent article Dr. Benjamin Schwartz,³ Chief of the Zoological Division of the U. S. Bureau of Animal Industry, reported that an investigation made by his department showed that almost half of the pork which had not been processed to kill the trichinas was infected. In most of it the parasites were dead. But 45 out of the 966 products examined (or nearly 5%) contained live trichinas. And these products came from plants under Federal inspection! As Dr. Wright pointed out:

We have been told by Federal meat inspectors that many garbage feeders avoid marketing their hogs in federally inspected packing plants in order to obviate price differentials resulting from condemnations under Federal inspection. In uninspected plants, trichinous pork may go into products customarily eaten raw by the consumer, thus providing very dangerous avenues of infection.

Thus, much of the most heavily infected pork is not subject even to the limited control now exercised by the Federal Government over meat sold in interstate commerce. For only 70% of the meat sold in this country is federally inspected.

WHAT protection does the consumer have against trichinosis? At present he has only one certain protection—and that is to cook all pork and pork products thoroughly.

Unfortunately, this protection is not as simple as it seems: first, because many meat products, such as frankfurters, some other sausages, and quite a lot of hamburger, are sold without any indication that they contain pork; second, because persons eating in restaurants have little or no control over the amount of cooking given their food; third, because the average consumer has little conception of the amount of cooking required to produce well-done meat.

Almost everyone has had the experience of ordering a hamburger in a restaurant, requesting that it be served "well done" and getting something seared on the outside and raw in the middle. And even in home cooking, much pork is served underdone, either by choice or otherwise.

For safety the temperature of every part of the meat must be raised to at least 137° F. to kill the Trichinella. A recent investigation reported to CU indicates that a piece of meat four

Output Description of Public Health, October 1939, p. 1133.
West Topics of Public Health, October 1939, p. 1133.

inches thick requires two hours and 45 minutes of cooking to reach this temperature throughout. And 45 minutes of cooking time must be added for each added inch of thickness. However, since trichinosis is not the only disease transmissible through pork, even more heat would be required to sterilize the meat completely. In general, the only safe rule to follow is to cook it until no part of it is even slightly pink.

It is obvious that protection against trichinosis by cooking alone, either in restaurants or at home, will seldom be adequate, because a vast number of persons like their meat rare and juicy, and they won't have it any other way. Properly, then, protection must begin at the source.

The most logical solution would be to prevent hogs from getting trichinosis in the first place by abolishing raw garbage feeding. As already pointed out, however, the record indicates that neither hog raisers themselves nor pressure-ridden municipalities can be trusted to sterilize garbage to be used for feed.

Therefore, it seems necessary that State laws be passed forbidding the use of uncooked garbage or offal for feed, requiring the maintenance of proper sanitary standards on hograising premises and providing for an adequate staff of inspectors to enforce the law. A Federal law should be enacted forbidding the shipment in interstate commerce of hogs fed on raw garbage or offal.

A second available method involves the treatment of all pork regardless of source, in such a way as to kill any trichinas that may be present. Refrigeration at 5° F. for 20 days would accomplish this, but it would also increase the cost of the meat. Consumers need not be told who would foot the added bill.

Since it is not feasible, owing to cost, to treat all pork, two alternatives are available: (1) to segregate infected pork by inspection and to treat only this meat either by freezing or heating; (2) to treat only those products that are customarily eaten without further heating (e.g., sausages) and to leave it to the consumer to see that all the rest of his pork is thoroughly cooked. The latter is the only protection now available to the American consumer and even that is applied to

⁹ Quoted in New Hampshire Health News, June 1939.

only about 70% of the pork sold in this country.

There is another method—more promising and less costly—of segregating trichinous from non-trichinous animals before they are slaughtered. This entails the use of a skin test, first introduced experimentally about 12 years ago and subsequently found valuable for the diagnosis of the disease both in man and animals. The method was recently improved, and tested on garbage-fed hogs, by Abraham Lichterman and Irving Kleeman of the Bureau of Food & Drugs of the New York City Dep't of Health.

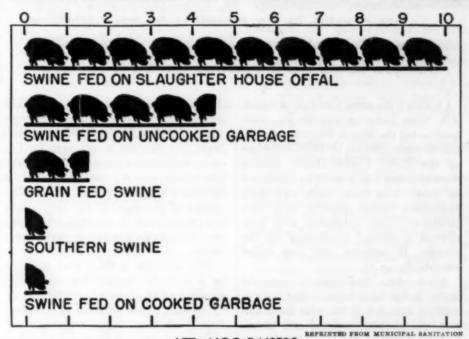
Their results showed a high reliability. A subsequent study of this test in the Federal Bureau of Animal Industry did not give so good a result. However, there are numerous pitfalls in immunologic tests of this kind and the promising results obtained by the New York investigators certainly merit further work. Once such a method were perfected, its routine application as required by law would effectively, and at small cost, segregate all trichinous hogs for processing.

AT PRESENT, packing plants that sell meat in interstate commerce are under Federal inspection, controlled by the Bureau of Animal Industry of the U. S. Dep't of Agriculture. In these plants, which represent about 70% of the total meat output of the country, pork products which are customarily eaten without further cooking are required to be heated or refrigerated sufficiently to kill *Trichinella*. Such products include frankfurters, bologna, Vienna sausage, Summer sausage, cooked ham, Italian-style ham and the like.

The Bureau recently reported a study of nearly 10,000 samples of these products, of which less than 1% contained trichinas, all of them either dead or nearly so. It appears from this that processed pork products that are customarily eaten without further cooking and stamped "U. S. Inspected & Passed" are probably reasonably safe, though the mass production methods used in large plants sometimes make it difficult even for the trained Federal inspectors to keep an eye on all the processes.

All other pork products, even though they bear this label, are suspect and must be cooked thoroughly. Pork

RELATIVE IMPORTANCE OF DIFFERENT TYPES OF SWINE AS SOURCE OF HUMAN TRICHINOSIS



ATT .: HOG RAISERS

Trichinosis found in swine fed on uncooked garbage, 4.5%; in Southern swine (which rarely has access to garbage) and swine fed on cooked garbage, 0.5%

emanating from plants not operating under Federal supervision are doubly suspect; local inspection, where it exists at all, is usually either desultory or completely ineffective. In addition, many butchers make their own pork sausage, much of it eaten with little or no cooking and subject to no control.

The Dep't of Agriculture long ago prepared a poster designed for display in butcher shops, and small slips for insertion in packages, emphasizing the necessity for thorough cooking of pork. But until their use is required by law, the consumer is not likely to read their message. Nor will he recognize the presence of pork in many of the products he buys until a statement of its presence is made mandatory.

The courts of the State of New York have three times decided that consumers are entitled to protection against trichinous pork. In two cases, trichinous meat purchased from a butcher was cooked—albeit insufficiently—and eaten, causing trichinosis. In the third and most recent case, a person ate insufficiently cooked loin of pork at a restaurant in New York City and subsequently developed trichinosis. In all cases the victims sued and were awarded verdicts by the State's highest court. The sale of the pork in each

instance was held to carry an implied warranty of its wholesomeness.

These are important victories for the consumer, and even lacking further legislation, should go a long way toward convincing hog raisers and meat packers that selling trichinous pork is not good business.

In the last few years a number of bills intended to reduce the sale of infected pork have been introduced in different State legislatures.

A stringent bill introduced last year in the California Assembly failed to pass, and a bill that would forbid the feeding of raw garbage to hogs met strenuous opposition in the Massachusetts Legislature.

A bill sponsored by Senator Thomas Desmond has just been passed by the New York Legislature. This measure creates a temporary State commission to study the problem of trichinosis and to recommend means of eradicating it.

Trichinosis could be virtually eradicated in the swine population in a few years. The means are available. But apparently they will be used only when sufficient consumer pressure is brought to bear on both the pork industry and the government.

Meanwhile, cook your pork thoroughly.

The B Vitamins

... are essential to the prevention of many nutritional diseases. But whether you need more of them than you get from your normal diet is a question best left to your doctor

A RABOUT the same time that scientists were isolating vitamin B₁ (thiamin)—see the March Reports—American investigators led by Dr. Goldberger of the U. S. Public Health Service were showing that something contained in yeast, lean meat, milk and leafy vegetables would prevent and cure pellagra. This substance was considered a second constituent of the vitamin B complex and was called vitamin B₂ or G.

Since Dr. Goldberger's original study, it has been learned that B₂ was really a complex of vitamins itself and that one of these, isolated and identified as nicotinic acid, is most effective in curing pellagra. At least three other constituents of what was known as vitamin B₂ have been isolated, identified and synthesized: these are riboflavin, vitamin B₆ or pyridoxine, and the "filtrate factor" or pantothenic acid.

Little is yet known about the function of either B₆ or the "filtrate factor" in human nutrition. Riboflavin has meanwhile appropriated the B₂ or G designation itself, and these terms are now used synonymously.

About nicotinic acid and its value in curing pellagra, much has been written in the past few years. And the brilliant investigations of Dr. Tom Spies and his associates of the University of Cincinnati Medical School and Dr. Elvehjem and his associates of the University of Wisconsin have conclusively proved that pellagra, traditionally associated with poverty and malnutrition, can be cured by specific vitamins—mainly nicotinic acid.

It is estimated that more than 400,000 Americans, particularly in the Southern States, are affected by pellagra and nobody knows how many thousands die every year from it.¹

Nicotinic acid in large doses (500 milligrams or more daily) relieves most of the severer symptoms of pellagra, but thiamin is necessary for the cure of the nerve paralysis (beri-beri) that often occurs; and riboflavin is necessary for the cure of certain disorders of the lips, of the skin about the mouth, and of the eyes, which are also frequently present in severe pellagra.

The evidence is clear that pellagra is a multiple vitamin deficiency disease due to an absence from the diet of foods rich in the vitamin B complex. Relief of the acute symptoms of pellagra is obtained by the administration of nicotinic acid and other vitamins, but permanent cure and maintenance of good health are achieved only by the eating of a full, adequate diet.

The prevalence of a severe dietary deficiency among so many Americans has been shown to arise largely out of social and economic conditions. Wage levels, relief income and educational standards in the South are the lowest in the country, so that many people either are forced to buy, or out of ignorance choose, the cheapest foods—molasses, corn bread and fat-back or fat pork—foods almost totally deficient in the B complex and other vitamins.

But pellagra also occurs in other parts of the country and in many cases results from ignorance about foods, from gastro-intestinal disorders or chronic alcoholism associated with marked restriction in food intake.

There is little information available in regard to the exact nicotinic acid and riboflavin content of foods. It is known that dried brewers' yeast and the glandular organs—especially liver and kidney—are excellent sources. It is also known that a varied daily diet which includes lean meats, milk, eggs, and vegetables—especially the green leafy kinds—will prevent pellagra and riboflavin deficiency. An excellent source of the B vitamins is

milk; cream contains vitamin A, but the B complex is present in the skim milk. When whole milk cannot be purchased or tolerated, skim, powdered, evaporated or condensed milk will provide a cheap and valuable source of riboflavin and other B vitamins.

Nicotinic acid and riboflavin, unlike thiamin, are fairly heat stable and not appreciably destroyed by cooking or heating. They are, however, like all members of the B complex, soluble in water and may be lost to a considerable extent if the water in which food is cooked is discarded.

The experience of Dr. Spies and his associates in the treatment of pellagra has shown what has been frequently stressed by other food scientists-that a vitamin deficiency will not occur if a full adequate diet is regularly obtained and if there is no constitutional or local disorder to prevent adequate absorption or utilization of the vitamins. The normal adult who will eat regularly a diet of whole-grain breads and cereals, milk and milk products, eggs, lean meats (liver and kidney particularly), and vegetables and fruits need not fear a deficiency of either B or other vitamins.

In certain states of ill health, however, a vitamin B supplement may be prescribed by a physician. The multiple vitamin preparations, such as Vi-Syneral and the "A B D" or "A B C D G" capsules of various manufacturers, are unsatisfactory for such purposes. Most of these preparations may be good sources of vitamins A and D² but they contain a relatively smaller proportion of the daily requirement of the B vitamins.

If a thiamin deficiency alone is suspected, the physician interested in the economics of prescribing will prescribe the pure thiamin. One milligram of thiamin in tablet form costs about 1½ cents; in elixir or alcoholic solution (such as Abbott's "Thiamin Elixir") one milligram costs about 10 cents.

If the entire B complex is necessary, many physicians will prescribe brewers' yeast tablets or powder, as offering a stable, potent and economical source of the B vitamins. If larger doses of thiamin, nicotinic acid or riboflavin are needed, they are prescribed as the

¹ Mortality data for 1938 compiled by the U. S. Public Health Service and published in *Public Health Reports*, February 21, 1940, show that 31,037 deaths from pellagra were reported in the U. S. in 1938. How many unreported cases occur can only be guessed.

⁶ Vitamin A and D preparations were listed in the February Reports.

pure vitamin to supplement the brewers' yeast.

Most of the B complex preparations listed in the accompanying table contain nicotinic acid, vitamin B6 and the filtrate factor, but in such negligible quantities that they are not given. The pure nicotinic acid is quite cheap and available in 25 and 50 mg. and 100 mg. tablets.

Wheat germ foods and cereals and fortified foods-such as Embo, Bemax, Vitavose, and Cal-C-Tose-are not economical sources of the B vitamins. Wheat germ oil is used chiefly as a source of vitamin E.

35 S

"Vitamin B Complex" Preparations

The preparations listed below are sold in interstate commerce and are therefore subject to supervision of the U. S. Food & Drug Administration. As pointed out in the listings of vitamin A and D preparations (February Reports), this supervision and checking, while limited, gives greater protection to the consumer than he receives with local products, which receive no checking by a disinterested agency.

Listings are in terms of cost per 333 International Units or 1 milligram of thiamin, and in terms of 1,000 micrograms or 1 milligram of riboflavin. Costs are estimated here on the basis of the larger sizes as they are currently sold in New York City drug and

department stores.

| BRAND | UNITS OF THIAMIN (8.) PER TABLET, CAPSULE, OR TEASPOONFUL ³ | MICROGRAMS OF RIBOFLAVIN (B.) PE CAPSULE, TABLET, O TEASPOONFUL ³ | COST PER 333 UNITS OR I MG. OF THIAMIN (4) | APPROX. COST PER 1000 MICROGRAMS (1 MG.) OF RIBOFLAVIN (¢) |
|-------------------------------------|---|---|--|--|
| Brewers' Yeast | Tablet | 5 | | |
| I. V. C | 50 | 30 | 2.0 | 13 |
| Macv's | 16 | 15 | 3.4 | 11 |
| Mead Johnson Brewers' Yeast Powder | 50^{3} | 125^{3} | 3.6 | 4 |
| Cooperative Distributors | 20 | 35 | 4.6 | 8 |
| Montgomery Ward's | 16 | 15 | 4.7 | 15 |
| Upjohn's | 25 | 25 | 5.7 | 17 |
| Mead Johnson | 20 | 50 | 6.0 | 7 |
| Squibb's | 16 | 9 | 9.0 | 48 |
| Abbott's | 23 | 30 | 12.3 | 28 |
| Capsules and | Tablet: | 5 | | |
| Lederle's Vitamin B Complex | 330 | 250 | 3.7 | 15 |
| Hoffmann La Roche Berocca B Complex | 300 | 100 | 4.2 | 38 |
| Abbott's B Compules | 330 | 100 | 5.3 | 54 |
| Eli Lilly's Betalin Complex | 333 | 100 | 5.3 | 54 |
| Squibb's B Complex | 300 | 150 | 5.3 | 32 |
| I. V. C. Blexin | 60 | 30 | 5.5 | 33 |
| White's Vitamin B Complex | 50 | 38 | 5.9 | 23 |
| Armour's B Complex Glanules | 150 | 200 | 6.2 | 14 |
| Montgomery Ward's B & G Capsules | 100 | 63 | 6.6 | 32 |
| I. V. C. B Complex | 100 | 100 | 8.3 | 25 |
| Stearns' Vitamin B Complex | 100 | 100 | 8.3 | 25 |
| Upjohn's Cerelexin Compules | 80 | 63 | 9.6 | 36 |
| Squibb's Vitamin B & G Capsules | 150 | 150 | 10.0 | 31 |
| Harris' Yeast Vitamine | 60 | 37 | 13.9 | 67 |
| Abbott's Be-Tabs | 35 | 25 | 15.0 | 60 |
| Abbott's Vitamin B Capsules | 150 | 100 | 15.5 | 71 |
| Abbott's Vitamin B Complex Tablets | 100 | 250 | 36.6 | 44 |
| Liquid | s | | | |
| Lederle's Vitamin B Complex | 500 | 600 | 4.2 | 11 |
| White's Vitamin B Comp. Concentrate | 2500 | 1250 | 6.0 | 37 |
| Squibb's B Complex Vitamin Syrup | 250 | 50 | 6.6 | 100 |
| Abbott's Vitamin B Complex Elixir | 166 | 200 | 7.7 | 19 |
| Armour's B Complex Concentrate | 150 | 80 | 9.0 | 53 |
| Winthrop's Betaplexin Elixir | 125 | 100 | 15.0 | 57 |
| Upjohn's Cerelexin Complex Syrup | 50 | 200 | 36.6 | 28 |

The Docket

Notes on government actions against misleading advertising, false claims, dangerous products

THE following cases are selected from scores of actions taken monthly by the Federal Trade Commission and the Food & Drug Administration.

The Federal Trade Commission has taken action against:

Scott Paper Co. The respondent agreed to desist from representations to the effect that all products sold in competition with Waldorf tissue, regardless of quality, contain splinters, rough or thin spots, dirt or other defects, and from use of any representation unfairly disparaging competitive products.

Examinations of toilet tissues made by CU in 1938 showed that Waldorf tissue was not superior to a number of its competitors. On the basis of softness and cost, many competing brands proved better buys (see 1939 Buying Guide).

Gruen Watch Co. In connection with the advertising, sale and distribution of its Gruen Curvex wrist watches, the company agreed to cease and desist from the use of any statement, or pictorial or other representation, which might convey the belief to purchasers that the principle involved in the Gruen Curvex wrist watches is the only way ever found to put a full-sized movement in curved wrist watches, or that the Gruen method of construction is the only way to make the movement big enough to give true pocket-watch accuracy in a wrist watch.

The Food & Drug Administration has seized:

Canned Tuna Fish (Van Camp Sea Food Co., Inc.). The article was alleged to be adulterated in that it consisted in whole or in part of a decomposed animal substance. Portions of the article were labeled in part: "Catalina Brand or Chicken of the Sea Brand . . . Packed by Van Camp Sea Food Company, Inc." The remainder was labeled in part: "Blue and White Brand . . . Red and White Corp'n Distributors."

Judge Hollzer, in imposing a fine of \$800, emphasized that the company, which in 1936 was convicted of shipping canned tuna in violation of the Food and Drug Act, had failed to change the inadequate methods of inspection that had resulted in the former conviction.

When CU rated canned tuna fish in April 1938, it found the quality of Chicken of the Sea brand the "most variable of those tested."

¹The potency of thiamin (or B₁) is usually indicated on a label in International or Chase-Sherman Units. Two Chase-Sherman Units equal 1 International Unit; 333 International Units equal 1 milligram.

² The potency of riboflavin (or B₂ or G) is usually indicated on a label in Sherman-Bourquin Units. One Sherman-Bourquin Unit is equivalent to about 2½ micrograms of riboflavin; 1,000 micrograms equal 1 milligram.

³ Per gram.

GENERAL SECTION

CONSUMER NEWS AND INFORMATION



Your Telephone Bill: II

Continuing CU's analysis of findings of the FCC investigation into A. T. & T., with data on what happens under the headings of "Commercial Expenses" and "Traffic Costs"

SECOND ARTICLE IN A SERIES WRITTEN FOR CU by MORITZ HOWARD

(Pictorial Charts on the Cover and Page 30 by B. Tagawa)

THE Federal Communications Commission's investigation of the American Telephone & Telegraph Co. and its 222 subsidiaries, authorized March 15, 1935, published its final report June 14, 1939. The total cost of the investigation was \$1,500,000. Were the time and money well spent?

One striking achievement of the investigation has been the series of five rate cuts for long-distance calls, the most recent of which becomes effective May 1, 1940. The way in which small FCC appropriations have been followed by substantial A. T. & T. long-distance rate cuts is startling, as the following chronology shows:

March 15, 1935—Investigation authorized, \$750,000 appropriated.

June 1, 1935—Company lowers long-

June 1, 1935—Company lowers longdistance rates for the first time in 5½ years; estimated savings to the public— \$824,000 a year.

April 1935-March 1936 — Preliminary investigation and publication of staff re-

January 15, 1936—Second rate reduction; estimated savings to public—\$3,359,000 a year.

June 22, 1936—Additional \$400,000 appropriation becomes effective.

propriation becomes effective.

September 1, 1936—Third rate reduction; estimated savings to public—\$7,495,000 a year.

November 1936 — FCC establishes Rates & Research Division; confers with company on long-distance rates. January 15, 1937—Fourth rate reduc-

January 15, 1937—Fourth rate reduction; estimated savings to public—\$12,-235,000 a year.

February 9, 1937—Final \$350,000 appropriation becomes effective. (Final FCC Report issued June 14, 1939.)

May 1, 1940—Fifth rate reduction; estimated savings to public—\$5,500,000.

The score thus stands at this date: Cost of investigation—\$1,500,000.

Estimated savings to public from long-

Estimated savings to public from longdistance rate cuts alone—\$29,413,000 a year.

The savings to the public do not, of course, mean an equivalent loss of revenue to the company. Loss of revenue through rate cuts is, in part at least, offset by increased patronage at the lower rates.

The circumstances surrounding the latest \$5,500,000 cut differ in a significant respect from the earlier ones. Whereas A. T. & T. indignantly denied that earlier cuts were the result of the investigation—stating that the connection between the investigation and the reductions was merely a "coincidence"—it has apparently acquiesced in giving the FCC credit for the present cut. The FCC pictures the company as "acceeding informally" to the rate-cut request, and commends A. T. & T. for its "forward-looking policy."

It remains to be seen whether this newly established era of good will between the FCC and A. T. & T. bodes well or ill for effective regulation of the telephone industry in the interests of the consumer.

In addition to precipitating specific reductions in interstate rates, the FCC investigation has unearthed some 90 volumes of information about inner workings of the Bell System which, if put to use by State Public Service commissions, should aid them immeasurably in their attempts to regulate intrastate rates.

The first article in this series reviewed two samples of FCC studies—the effect of defective handset telephone design on the \$11.79 (out of the average \$64 annual telephone bill) which goes to pay for current maintenance; and the peculiar policies which give rise to an \$11.35 charge (out of the \$64) for depreciation.¹ This month two additional sample items will be scrutinized: public relations costs as part of commercial expenses (which total \$5.32) and the effect of dial switching on traffic costs (which total \$9.31).

Commercial Expenses (\$5.32)

A. T. & T. defines commercial expenses as "costs incurred in business relations with customers," including sales activities, cost of directories, advertising, &c.

Bell advertising expenditures do not loom large on your telephone bill; they total only about \$5,000,000 a year, or 30¢ per phone. But the effect that \$5,000,000 a year can have on consumer interests is incalculable.

A fascinating series of indiscrete but revealing memoranda, showing use of advertising appropriations for political and rate-increase purposes, has been uncovered by FCC investigators in the Southern Bell territory.

The Jackson, Miss., Clarion-Ledger had long been "very unfriendly towards the telephone company." In 1923, telephone advertising was placed in that paper. A little later one telephone executive wrote:

Notice clipping from Clarion-Ledger re: Attorney General injunction. The increased advertising has helped.

When South Carolina weeklies were cut from the Bell list in 1927, the owner of the Aiken Standard wrote:

The Southern Bell is seeking to secure an increase in rates in Aiken, and your Mr. J. J. Roach, who has the matter in charge, will bear me out that I have been of assistance in the matter.

As a result, advertising in the Aiken Standard was continued.

Thomas L. Cannon published a Birmingham, Alabama, newspaper. On

¹But see page 29 for changes in these and subsequent figures in A. T. & T.'s annual report for 1939. Figures used in these articles and in the pictorial chart on the cover are the FCC figures and include revenue from local, long-distance and miscellaneous services, both private and business.

December 19, 1927, the Southern Bell Birmingham manager wrote:

In view of the splendid work that is being done by Colonel Cannon in connection with his fight against the question of taxes against the State of Alabama, I thought it would be well to give him a complimentary advertisement.

Complimentary advertisements were

The editor of the Carolina Watchman was a member of the State Legislature in 1931. Advertising placed in his paper in 1932 was described as "really more in the way of a donation than anything else." The Elizabethtown (Ky.) News received advertising, according to Bell files, because:

... the Editor of this paper is very influential in that section as well as in State politics.

Such are documents actually found in Southern Bell files; how many like them have been long since destroyed, or how many similar messages were sent by telephone, no one can say.

Bell System paid advertising is a mere trickle, however, compared with the free publicity which the system obtains. The Bell publicity handout, News and Views of Telephone Service, is distributed in quantities of more than 10,000 a month. During a sample three-month period, 284 newspapers used 1,157 items from this source alone, filling 12,525 column inches. In 1933, 521 newspapers carried an estimated 84,800 inches of Bell publicity—enough to fill 500 newspaper pages.

Expenditures are not limited to newspapers. A. T. & T. has subsidized three books, one a bitter attack on public ownership; has hired lecturers to speak in schools and colleges; has produced 56 motion-picture films attended by as many as 74,000,000 people in a single year; has contributed to public utility propaganda organizations, to syndicated "news" services, &c. The Bell System purchases memberships for its employees in Lions Clubs, Rotary Clubs, Kiwanis Clubs, Chambers of Commerce, &c. In 1934 \$473,000 was paid for 7,960 such memberships, the bulk of the cost being passed on to telephone consumers as 'operating expenses."

The \$5,000,000 a year spent for advertising, plus the other sums expended for the purchase of "good will," are not among the major expense factors. But their indirect effect

is nothing slight. Says the FCC "Report":

Bell System publicity reaches its peak during the periods when rate increases are either pending or proposed. Publicity during these periods is organized systematically along the following lines: The preparatory canvass for public endorsement of the rate project, preparation of newspaper advertisements preliminary to hearing, during the hearing, and following the decision; preparation of publicity for use by employees, including letters, booklets, and envelope enclosures; publicity for use of subscribers and the general public . . .; publicity for the press, including news stories, interviews, and suggestions for editorials; suggestions with respect to the type of talks to be made to commercial clubs and similar organizations; preparation of publicity for window posters; preparation of samples of resolutions to be adopted by commercial clubs.

Most of the cost of such campaigns is paid—via the telephone bill—by the very consumers whose interests are imperilled.

Traffic Costs (\$9.31)

TRAFFIC expense, described by A. T. & T. as "costs incurred in the handling of messages, principally opera-

tors' wages," is the one expense item which the Bell System has in recent decades most drastically reduced.

| | | | | | T | RF | AE | FR | FIC COST PHONE | PERCENTAGE OF |
|-------|--|--|--|--|---|----|----|----|-------------------|---------------|
| 1920 | | | | | | | | | 17.11 | 33.19 |
| 1925 | | | | | | | | | | 25.73 |
| 1930 | | | | | | | | | 13.46 | 20.50 |
| 1935 | | | | | | | | | 9.31 | 14 54 |
| 1939° | | | | | | | | | 10.15 | 14.81 |

The reduction here is due in part to introduction of the stretch-out (defined as increased number of units of work per operator per hour). Prior to 1929, the average load per operator per hour never exceeded 134.6 units. Thereafter, it jumped by leaps and bounds.

| 1930—139.7 | units | per | hour | per | operator. |
|------------|-------|-----|------|-----|-----------|
| 1931—150.3 | units | рег | hour | per | operator. |
| 1932-163.2 | units | per | hour | per | operator. |
| 1933-172.3 | | | | | |

A. T. & T.'s chief engineer estimated in 1931 that every added unit of work saved the Bell System \$1,000,000 per year. Says N. R. Danielian:

This speed-up system, while it increased the operators' average load by 29% from

² Approximate.



A.T.&T.'s Busiest Year

On March 5, 1940, A. T. & T. published its consolidated system report for 1939, showing the largest number of telephones in service (16,535,804 on December 31 and about 16,152,000 average during the year), the largest number of telephone calls (73,802,000 a day), the largest gross operating revenues (\$1,107,197,698), the largest investment in telephone plant (\$4,590,509,972), &c., in the history of the company. The average telephone bill was \$68.53, highest since the infancy of the telephone.

Net earnings were \$13.43 per telephone, highest since 1929.

A comparison of the FCC figures used in these articles with calculations based on A. T. & T. figures for 1939 shows:

| 2707 5301101 | 1935 FCC FIGURES PER PHONE (\$) | ESTIMATES PER PHONE (\$) |
|----------------------------|--|--------------------------------|
| Current mainte- | | |
| nance | 11.79 | 13.25 |
| Depreciation | 11.35 | 9.91 |
| Traffie | 9.31 | 10.15 |
| Commercial | 5.32 | 5.45 |
| General and mi | ise. | |
| (incl. taxes) Total ex- | 13.63 | 16.34 |
| penses Net telephone | 51.40 | 55.10 |
| earnings | 12.60 | 13.43 |
| AVERAGE BILL | L 64.00 | 68.53 |
| | | |

The increase in size of the average telephone bill is due in part to increased use of long-distance service following the 1935-1937 rate reductions. Increase in "general and miscellaneous" is partly due to increased taxes, which in turn result in part from higher profits.

Noteworthy is the decrease in depreciation charges, which were discussed in full last month. The decrease has been long overdue. Bell System depreciation reserves now amount to 28.4% of investment in plant, highest in history. TRAFFIC DEPT. EMPLOYEES - MOSTLY OPERATORS

DOLLARS INVESTED IN EQUIPMENT

1929 AAAAAAAAAAAAAA

EACH BAG REPRESENTS 100,000,000 DOLLARS

YOU SAVED ON TRAFFIC COST BUT PAID MORE ON CAPITAL COST

TRAFFIC COST - PRINCIPALLY OPERATORS' WAGES

YOU PAID LESS

COST OF INVESTMENT IN EQUIPMENT

YOU PAID MORE

EACH COIN REPRESENTS A DOLLAR THE AVERAGE CONSUMER PAID TO COMPANY

WHAT PRICE "SAVINGS"?

Labor-saving devices are traditionally heralded as aiding the consumer by lowering costs. A. T. & T.'s labor-saving mechanization program, however, aided suppliers of capital rather than consumers. The discharge of operators and

savings in operators' wages (left) was exactly offset by the employment of added capital and increase in interest or dividends paid that capital (right). Cost of investment is calculated on the basis of 61/2% interest.

1930 to 1933, must have dispensed with the services of over 30,000 operators.3

The second basis for the reduction in traffic costs was increased mechanization of the system, and especially introduction of automatic dial switching. Bell engineers have estimated that the company saved \$8.08 per telephone per year in direct labor costs for every station transferred from manual to dial operation. Today about 56% of all Bell telephones are automatic.

The period of most rapid mechanization was from 1929 to 1934, five years during which 2,306,000 phones were changed over from manual to dial, increasing the percentage of dial phones from 26% to 47%. This period is worthy of especial attention, for it reveals most clearly the fact that the savings resulting from stretch-out and mechanization were not passed along to the consumer. A sort of balance sheet for the Bell System stretch-out and mechanization policy can be drawn up, illustrating a heavy loss to telephone employees with no compensating gain to telephone consumers.

On the credit side is the reduction in traffic costs from \$14.27 per telephone in 1929 to \$9.28 in 1934-a 34.8% decrease. On the debit side is, first of all, the decline in traffic department employment from 184,901 to 115,717-a 34.5% decrease.4

Of the 69,000 employees displaced, approximately 65,000 were telephone operators earning less than \$1,000 per year. Not more than 10% to 15% of the decline in employment can be traced to a decline in volume of busi-

But unemployment was not the only item on the debit side. For while traffic costs were drastically reduced, there was in fact no saving to the consumer. The saving in traffic expense was offset by an increase in other expenses.

During the period of rapid mechanization, 1929-1934, while the Bell System was reducing traffic employment by 69,000 in the face of nationwide depression, it was simultaneously investing 250 million additional dollars in equipment alone.

Investment in plant and equipment increased by \$400,000,000. Capital stock increased by \$447,000,000. The Bell System was thus using dollars, and the machinery which dollars buy, in place of men.

4 Decline in traffic department employment was not offset by any increase in manufacturing department or other employment. Total Bell System employment declined from 454,000 in 1929 to 273,000 in 1934. By 1939, with business at an all-time high,

employment had increased only to 297,000. In spite of an increase in revenues, number of telephones, number of calls, &c., employment was 34% lower in 1939 than in 1929.

Did the dollars work more cheaply than the men and women they displaced? Here is a comparison:

Interest at 61/2% on 76.67 additional dollars per telephone (1934 over 1929)-\$4,99

Savings on traffic expense per telephone (1934 under 1929)—\$4.99.

The cost of added capital, in short, exactly balanced the savings in traffic costs. Nor was this all. The added equipment also gave rise to added depreciation charges, added maintenance expense, added taxes, &c., each year. Thus mechanization of the Bell System not only produced unemployment, but wholly failed to decrease your telephone bill. Payroll savings were passed along, not to consumers, but to suppliers of capital.

Unquestionably introduction of the dial system improved service in most areas where it was introduced. But there were also other advantages from the point of view of those in charge of A. T. & T.'s destiny. When they hire dollars instead of men, there is a substantial profit to the bankers from underwriting. The dollars thus hired do not require washrooms or rest periods; above all, they do not join labor unions.

In testimony before the FCC, A. T. & T. President Walter S. Gifford

. . . as to the people laid off, of course

there is nobody more unhappy about that

³ "A. T. & T.: The Story of Industrial Conquest" (Vanguard Press, NYC, \$3.75). Mr. Danielian was one of the FCC investigators; his book is recommended as a well-written popular account of the investigation.

than I am, but we cannot keep people on If there is nothing for them to do. We tried for a long time to keep people on, we were as slow as possible in laying them off, and we did everything we could think of at that time to ease the situation, but that is the treacher of the situation. if there is nothing for them to do. tion, but that is the tragedy of a depres-

But while A. T. & T. "cannot keep people on if there is nothing for them to do," it can and does keep dollars on, and hires more of them. Throughout the depression stockholders' dollars invested in A. T. & T. received 9% a year, whether they were at work or

lying idle.

The decision to convert Bell System phones to automatic switching was made in 1917, on the basis of preliminary estimates indicating that dial equipment would cost from \$18.53 to \$56.04 per phone. As soon as the decision was made, estimates jumped to \$73 and even to \$149 per phone. Even these estimates proved woefully inadequate; the cost of early installations averaged \$278. Since then costs have come down; but the average cost of dial equipment in service remains about three times as high as the highest preliminary estimate.

The FCC investigated one case in which a telephone company balked at paying the spread between the estimate and the final bill. An A. T. & T. subsidiary, Southwestern Bell, had ordered dial equipment for its Kansas City office at \$95 per phone. Thereafter it sold the Kansas City property to an independent company. When the independent company received a bill for \$172 per phone instead of \$95, with an estimate of \$203 for additional lines, it balked. The vice-president wrote to Western Electric:

With no savings to be obtained through the introduction of this equipment, we find ourselves in an exceedingly difficult position in that it will be out of the question to obtain a rate structure in Kansas City anything near like what your approximate estimate of \$172 per line indi-

Apparently Bell executives felt differently about what kind of a rate structure could be obtained in Kansas City. They repurchased the Kansas City property, then paid their Western Electric affiliate \$180 per phone for the equipment.

(The third article in this series will discuss other aspects of the Bell System.)

War & Prices Eighth of CU's special reports on effects of war on prices & products

R ETAIL prices were fairly steady during the past month, but there have been developments in wholesale markets that will be felt by consumers soon. The first is good news. Gotham and Van Raalte have announced 10% to 15% cuts in the prices of women's silk stockings effective immediately to retail distributors, with "suggested" reductions of 15% to 20% to be passed on to consumers this month.

Gotham announced that manufacturing economies resulting from the installation of new machinery made its reductions possible; Van Raalte, a few days later, stated that it was able to meet the cut because its raw silk had been bought at \$2.75 a pound instead of the then current price of \$4. Consumer resistance to the price advances made earlier this year was not mentioned in the announcements but was doubtless an important factor.

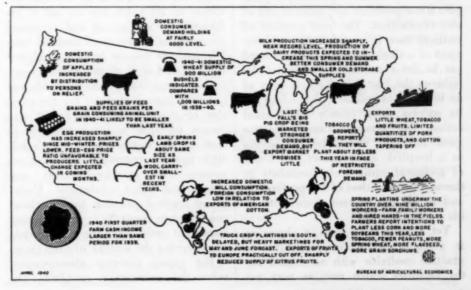
The recent chain of events in silk hosiery has been, briefly: (1) price of raw silk rises sharply on declaration of war; (2) prices of Fall styles are increased somewhat; (3) price of silk rises still further with lapse of Japanese trade treaty; (4) hosiery prices are raised sharply; (5) hosiery sales and silk purchases drop; (6) silk prices begin to decline; (7) hosiery prices are reduced.

Gotham plans to be among the first to offer nylon hosiery and has also brought out for widespread distribution a sheer lisle mesh stocking designed by the Dep't of Agriculture's

Bureau of Home Economics toward the end of making lisle sufficiently attractive so that hosiery will become a substantial outlet for domestic cotton. The possibility that nylon and lisle will make considerable inroads into silk hosiery sales may have influenced Gotham to initiate a price cut at a time when raw silk prices are still relatively high and when it is more difficult for others to follow suit.

The declaration of war started a series of events in woolen goods that has been developing more slowly but which may in time have an appreciable effect on the retail price of men's suits. Manufacturers of fabrics are now turning out materials for Fall wear from the higher priced wool bought last Fall. They have announced increases of 25¢ to 30¢ a yard on this material, which means 60¢ to 75¢ more for the 2½ yards or so required to make a suit. This would probably result in a larger increase in the price of suits to consumers since manufacturers', jobbers', and retailers' margins are often a fixed percentage of the prices each one pays.

Thus a rise in the prices of raw wool or in fabrics is multiplied at each step. It is reported that most chain stores intend to hold prices of suits unchanged and are therefore seeking to cut quality slightly. Consumers who are willing to defy moths and the whims of style might save a few dollars or get materials of somewhat better quality by buying Fall suits now.



Group Health Associations

are one way to give the consumer the medical care he deserves at prices he can afford. First of two articles on this important development by KINGSLEY ROBERTS, M.D.

Two statements regarding medical care today have been made so often that they are fast becoming platitudes. The first is that a majority of American people receive inadequate care according to reasonably good standards; the second is that for the past 50 years we have been witnessing the transformation of medicine from an art based on intuition to a science based on facts (and that change-over is, of course, a continuing process).

These abstractions have for most people, been supplemented by their own personal experiences in trying to meet doctors' bills which devastate the budget, in trying to find a good doctor when no yardstick of quality is available.

Proposed panaceas have run the whole gamut of possibilities. Meantime, out of the welter of discussion and experimentation, certain clearly defined principles and objectives have emerged.

The consumer wants the best health care available. He wants it at a price he can afford to pay and he wants to know in advance exactly what that price will be. The most satisfactory answer to these requirements is group practice financed by the consumer through the spread-cost, share-cost method of payment.

Modern medicine is probably as complex a composite as any other aspect of our civilization. The end product of medical care is no more the achievement of a single physician than a Ford car is the creation of the man who tightens the last bolt. Each is part of an intricate assemblage, depending for its success upon closely coordinated action. The physician cannot practice good medicine unless he has access to a hospital, a laboratory, all kinds of technical equipment, specialists in the various branches of his profession, and to all the current discoveries in his particular field.

Yet, despite these facts, a physician is given a license in perpetuity to practice medicine with no regard for the facilities which may or may not

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The accompanying article is the first of two by Dr. Roberts. The second one will discuss group health units throughout the country, will examine ways in which consumers may join or organize such groups to obtain group health

be at his disposal, and the availability of which will determine the quality of the care which he will be able to

ROUP practice is the coordinated Cassociation of a number of physicians representing different skills who share offices, equipment and other facilities. In such a group the physician ceases to be an isolated fraction of the whole and assumes his proper place in the general design. He is under constant supervision by his fellows. He is continually exposed to scientific advances in all fields and he has at his disposal the equipment and personnel necessary to render good medical care. His patients benefit by the combined wisdom and skill of the whole group.

Group medical practice affords not only the logical medium for the exercise of modern medicine but it also makes possible major economies in cost. Of the independent doctor's bill 40% to 60% represents overhead expenses-rent, personnel, x-ray machines and other equipment. Under group medical practice, this overhead can be cut to about 20%, thus effecting important savings for the patient without lowering the quality of care given.

But group practice alone cannot solve the consumer's problem. The solution can be achieved only when group practice is combined with group purchase.

One family out of every hundred at any income level spends a quarter or more of its annual income on medical bills. These bills represent an aggregate of diversified services-the doctor's bill, the surgeon's bill, various specialists, x-ray plates, hospital expenses and so forth.

Even the best-intentioned physician in the world in his role of "private tax collector" cannot adjust his fees in such a way as to bring these expenses within the budget of the average individual. Further, illness strikes at random; for the individual it is

totally unpredictable.

But what is unpredictable for the individual can be predicted with reasonable assurance for groups of people. This principle has long been familiar in terms of insurance. Its adaptation to medical needs is a more recent development but one that has already proven its suitability. It is the basis for all the spread-cost, share-cost prepayment plans now in existence. An association of individuals decides what items of health care it wants entered in the budget. The average costs of such service is then charged up to the individuals in the form of annual dues, paid equally by all the participants.

When this method of payment is combined with group practice rendering a service covering all the major items of the medical bill, it becomes possible for most wage earners and salaried individuals to receive and pay for the best that modern medicine has to offer. And this best includes not only curative but preventive medicine.

When all the financial barriers between patient and physician are lowered; when the physician has a stake in his patient's health and not in his illness; when the patient is free to visit his physician upon the first symptom of disease or for a physical examination without incurring a financial loss; then preventive medicine becomes a reality and not an empty dream.

The role of voluntary plans is primarily that of rendering service to those individuals who can pay for their care if given the opportunity to do so. Beyond that, for all the people, these plans are important as experimentations in quality and organization of service and in training professional and administrative personnel.

Labor in the Linoleum Industry

A supplement to the technical report on page 6

THE manufacture of linoleum in the United States is dominated by four large firms. As Fortune magazine reported in May 1937, "of the country's \$26,000,000 linoleum business [Armstrong] has some \$13,000,000 worth, more than either Congoleum-Nairn, Sloane-Blabon, or the Paraffine Companies of the West Coast, its principal competitors."

The only available wage figures, recorded in the "Statistical Abstract of the United States," show that the industry employed some 3,716 workers in 1935 who were paid \$4,624,000 in wages, or roughly, \$1,244 per worker. This would average \$24 weekly per worker, but the figures above doubtless include also highly paid supervisory workers.

From the data on labor conditions in the industry submitted below, it seems fair to assume that the low weekly average paid by the linoleum industry as a whole is a direct result of the lack of unionization in Armstrong and Congoleum-Nairn. So long as these two firms remain not only unorganized but, apparently, militantly opposed to organization, wages in the industry will doubtless remain low.

Armstrong Cork Co. Robert Cruden, publicity director of the United Rubber Workers of America, the CIO union which is organizing linoleum workers, characterizes this company as "bitterly anti-union." The URWA, Mr. Cruden continues, "is engaged in an organizational campaign at the Armstrong Cork Plant at Lancaster, Pa. The company is resisting organization and works through the Linoleum Workers Protective Ass'n, a so-called independent union."

The company's labor policies are presumably reflected in the outlook of its president, who was recently elected President of the National Ass'n of Manufacturers, one of the major pressure and propagandistic groups in industry, and an organization which the LaFollette Committee found to be militantly anti-labor.

Congoleum-Nairn, Inc. This company also is characterized as "bitterly

anti-union" by Mr. Cruden. The URWA formerly had a local at this company's plant which broke up, Mr. Cruden says, "after a prolonged strike, during which the company used the usual strike-breaking tactics."

Paraffine Companies, Inc. In an article in Chemical and Metallurgical Engineering, April 1939, R. H. Shainwald, vice-president of the company, said that an open shop had been maintained for 53 years. The management, he said, felt that unions would not interest its 1,500 employees because the company paid them the highest wage in the industry, gave them free group insurance, and annual vacations with pay. Despite this, however, the employees, in a secret poll in 1937, turned in a 55% vote in favor of unionization. Thereupon, the company signed contracts with 18 unions, both AFL and CIO, which claimed jurisdiction. Mr. Shainwald then observes:

As Pabco management and employees became accustomed to the new working arrangements and old suspicions died out, a new spirit of trust and understanding began to creep through the entire organization. . . Labor efficiency is [as a result] the highest Pabco ever has had—and the wages are the highest Pabco ever has paid

ever has paid. . . .

When in 1937 Pabco made the difficult decision to relinquish the paternal attitude toward its employees and to place the full responsibility for labor efficiency squarely upon the shoulders of the petitioning unions, the management was skeptical of the outcome. Subsequent events, however, have proved that labor relations, based on full understanding of employer-employee problems, can be harmonious and profitable to management and labor alike.

Sloane-Blabon Corp. According to Delegate Ralph Bridges of Local 148 of the URWA, as reported in his union's paper, this "company has cooperated with the unions... to the fullest extent to improve working conditions and raise the standard of living of their employees." In July 1939 the locals renewed union shop agreements, covering 1,100 workers in two plants, for the fourth time. The agreement provides vacations with pay for all workers who have served one or more years. An adjustment in wages amounting to \$13,000 was made and strict seniority established.



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There Ought to be a Law ...

by RACHEL LYNN PALMER

Chains & Taxes

HEARINGS on H.R. 1, the Patman anti-chain store bill, began March 27 with the author of the bill—Rep. Wright Patman—appearing first.

He proposed several amendments, most of them in the direction of easing the provisions of the bill. Most significant of these appear to be two: one, according to newspaper accounts, would reduce the proposed tax by 50% and a second would exempt chains consisting of not more than 50 retail outlets which are located in the same State as the principal place of business.

Testimony may continue for from three to six weeks and, with both parties anxious for Congress to adjourn early, chances of action on the bill at this session seem slight.

The chains, both corporate and voluntary, have their hands full with legislative proceedings in various States, too.

In Omaha, the State Attorney-General, acting under the Unfair Practices Act, has filed suit to oust A&P stores from Nebraska on the ground that the chain has monopolized commerce. The chain, the petition charges, has set lower prices in three Omaha stores than those set for the same commodities in its Falls City store with the intent to destroy the business of its Omaha competitors.

The A&P has replied that its Omaha self-service supermarkets have lower operating costs and that the lower prices merely reflect these savings.

In Colorado, the State plans to file claims for back taxes on voluntary grocery chains such as IGA and the Red & White, as well as voluntary chains in other fields. Claims will cover the five-year period beginning with January 1935, when the chainstore tax went into effect.

Health Trust

THE RULING of the U.S. Circuit Court of Appeals for the District of Columbia that the American Medical Ass'n can be prosecuted under the Sherman Anti-trust Act will hearten

those interested in the formation of group health associations (see page 32). The Dep't of Justice, it will be remembered, brought an indictment against the A.M.A. charging that it had conspired to destroy the business of Group Health Ass'n, Inc., a non-profit medical cooperative set up in Washington, D. C., to provide its members—mainly low-paid government employees—with medical care and hospitalization.

That indictment was set aside by a District Court decision that the practice of medicine is not a trade and that therefore the activities of the A.M.A. cannot be judged in accordance with the provisions of the Sherman Anti-trust Act. The reversal of this decision means that the suit against the A.M.A. can proceed.

Regardless of the outcome of the suit, the establishment of the principle that the A.M.A. cannot with impunity indulge in practices which would be illegal on the part of a business organization is of great importance. The A.M.A.'s long-continued and bitter opposition to group health plans has been one of the greatest single obstacles to their growth. Now physicians can hope at least for some legal protection if the A.M.A. seeks to deprive them and their patients of hospital privileges and to cause the physicians to be "disciplined" by their local medical societies for daring to associate with medical cooperatives.

Milk Trust

THE Pure Milk Ass'n, which, along with the Borden Co., is one of the chief defendants in the Dep't of Justice suit against various individuals and corporations charged with conspiracy to fix prices and control the supply of fluid milk in the Chicago area, has announced its willingness to sign a consent decree to avoid standing trial. A consent decree would specify the things which the Association may or may not lawfully do in the selling of milk. Whether all the defendants will sign consent decrees and the case be thus terminated is not yet known.

Quote Without Comment

"If grading means quality and not safety, the point at issue is whether Grade B milk is as safe as Grade A. Eminent authorities on the subject, including

the Board of Health, of which the Commissioner of Health is the Chairman, say definitely "Yes." Does any one suppose that the Mayor would dare say what he did about Grade B milk unless he felt that every mother in the City was taking absolutely no chance with her children in buying B instead of A? If, on the other hand, A is a safer milk to drink than B, the Health Department should immediately raise the standards on Grade B milk, as it is obviously unfair to have a safe grade of milk for the rich people and a less safe grade for the poorer ones. . . "—William Fellowes Morgan, Jr., Commissioner of Markets for New York City.

". . . Let's quit fooling ourselves that the public has the mind of the average fourteen-year-old and can be shoved around as we see fit. If we'don't already know it, with chagrin, we should be told by some kind and bold friend, that we are being laughed at, scorned, derided and even ignored by a public that is fed up with our word gymnastics. Are we so infantile ourselves—so restricted and limited in our capabilities that we cannot present a fact or a series of facts in language of a texture and color that will be charming and compelling without resorting to all the adjectives in the book? . . ."—Herbert H. Stalker on "Reckless Copy Writing" in Printers' Ink.

"... one-third of the Nation's 39 million families and individual consumers had incomes of less than \$780 during 1935-36. Another third received between \$780 and \$1,450, while the incomes of the top third varied from \$1,450 to over a million dollars....

"Not all of the families and individual consumers in this poorest group had deficits for the year.... But for the group as a whole, consumption expenditures exceeded income by 17 per cent. With gifts and personal taxes added, total outlay exceeded income by almost 20 per cent. While the average income of the group was \$471, average outlay amounted to \$563, leaving an average deficit of \$92.

"For the middle third of the Nation, current consumption expenditures were almost twice as great as those for the lower third, amounting to nearly \$14 billion, or 28 per cent of the national total. A large proportion of the families and individuals in this American 'middle class' also showed deficits for the year, but the average consumption expenditure of \$1,056 for the group as a whole came just within the average income of \$1,076. This \$20 leeway, however, was not quite sufficient to cover the average additional amount of \$39 paid out for gifts and for certain personal taxes, so that for this group also savings were 'negative' for the year, rather than positive. Thus for the poorer two-thirds of the Nation the incomes received during 1935-36 were too low, on the average, to cover current outlays. . . ."-From a statement by the National Resources Planning Board, reviewing findings of its studies of consumer incomes and expenditures.

". . . Radio, despite the eventual advent of new and improved forms of transmission and reception that may assist in minor ways in obsoleting old radios, is fast approaching its real saturation point. When reliable statistics show us that roughly 87 per cent of the homes in the country have a radio set, it is time we thought about effective ways to encourage replacement. . . .

"If the leaders of the industry as a whole would get behind the chairside models, they could, within two years, obsolete the console. . . ."—From an article in RADIO TODAY.

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"Millions on Wheels"

Written to provide standards for selecting a new or used car and for operating it safely and economically, this book gives buying data on autos, tires, gasoline, batteries, etc., based on CU tests. Written by D. H. Palmer and Laurence Crooks. "The authors...are performing a public service of high order."—New York World-Telegram.

"False Security"

This book about the betrayal of the American investor was written by Bernard Reis, treasurer of CU and a certified public accountant of long experience in investigating stock and mortgage frauds. "Investors, both actual and prospective, will find Mr. Reis' competent and sincere work extremely valuable for the information and guidance it contains."—New York Times.

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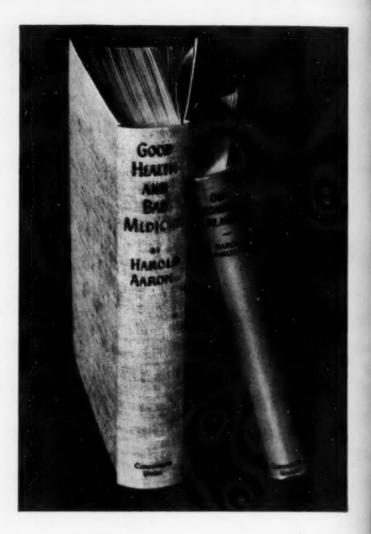
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